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TUTTU-hanke : TUTkimuksellinen ja Toiminnallinen Ulkonaoppiminen

Helsingin yliopisto

2019-12-14

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Vdud Olqgkr qd K hhdq f wwp -wlp 1



Nr xoxwdrdw
Dud NddMqhq/ Dqwrql Nhuyiqhq/
Wxod Uliwqhq/ Wkr p dv Dlyh r Mq Ulinehuj

Nr xoxvnhq r vdwqxqhwr shwdrdw

Wk Wk Ok d q n h

Wk Wk l p x n v h d q h q r d W l p l q q d d q h q
X o r q d r s s l p l q h q

VXVWX KDCQNH=VXwlp xnvhøqhq rd wlp lqqdøqhq xør qdr ssip lqhq

VXVWX OVXwlp xnvhøqhq rd wlp lqqdøqhq xør qdr ssip lqhq

I W/ hnr øjldq | ðr slwøqðkwrul mnd
w/ønhqvnðh Kholqj lq | ðr slwøq Elr 0rd
| p sCEwøshvñhvhwCE vñghnxqqdwd
r shxvñhvwd ydwdyðd ydøghndøqlqd1
Khdqdr q vøxwødøq ndylvñhvñq vxvñrd
rd r shwørd/ rd vxvñl ndylvñq hnr øjldd/ rd
ndylvñq wøghkwp lvñq hnr i|vñ øjldd1
Khdqdr q vxr wøqwxndylvñhvñq yhunnr 0
r ssip dñdødd nr xøøvñøñ1 KCE r q
wlp lqwx slwCE vñghnxqqd
dghq r shwørd r xøxvñhv sduwd1

I P/ Elr øjldq rd p dðvñhvñq r shwørd/
mnd r q wlp lqwx r shxvñhv r khød
p xndqd p r qhqølvñwd shgd r jlvñwd
dldqwxqvñd/øvCE Vldq yllp hñndvlq
sur rñvñklq r q nxxøqwx hmp hunñv
VXVWX Kdqnñhv nrruglqrlqw vññCE
p xxq p xdw elr øjldq ndqglr krñp dq
rd ndylelr øjldq p dñwñr krñp dq
Glj lø lñndøsur rñvñklq r vøwøp lqhq
Kholqj lq \ ðr slwørd1

Nr xøwørd=

I W/ Elr øjldq glgchvñd | ðr slwøqðkwrul w/ønhqvnðh
Kholqj lq | ðr slwøq Ndvdøwñhvñq r vdwørd1 Durdø r q
slwCE rñp xv xør qdr shwørd lvñwd r shxv0rd
wvñp xw/ø p | øCE KCE r q wlp lqwx r ndq r shwørd d/
r shwørd r xøwørd rd vEghq q| vñr xøwørd d yx ghwd
4<< øCE hvñ1 Nhñhvñq vxvñp xwñp d r q xør qd
r ssip lqhq/ elr glyhulvñhvñd ydøv rd øhvñq q lwxv1 Durd
r q shxwøqwx r p hq øvñq p hwCE hvñs øCE/ mnd
ndq qxwørd ndñndylvñp CE øsvd xø v r ssip dðq1

I P / W k w r u n r x o x v h w y d v / o s n h q v d n h K h o l a j l q | d r s l w r q
N d y d x v h v h g h q r v d w r o d 1 D q w r q l r q n r x o x v n v h o d d q
e l r o j l d q r d p d d q v h v h q r s h w a d v n n O e r n d q r s h w a d 1 K O e r q
w l p l q x w | d r s l w r o d n h k l w e f e f e r q l d d w e l r d
w x v l p x n v h o d r s s l p l v h q v e r n d v n O e s h w a d q n r x o x w a d d q
r d v e g h q q | v n r x o x w a d d 1 Y O e s n l u d x v l p x n v h w d d q D q w r q l
w x v l l x o n r O s s l p l v p s O e w e v O e s d k w y d d r s s l o g h q
y x r u y d n x w e l r d r s s l p l w d v n h y l d r s h x v e r n h q r d e

I P / V x d r q v o k w a d d q o x q q r q p d d q v h v d r O e / n O e
p d d q v h v h q r d e l r o j l d q d q h q r s h w a d 1 V x d r q h u l w e f
n l l q q r w x q x w l h g h n d y d x n v h w d / m q n d s d l w d k O e r q
v / o s n h q q h o l w K h o l a j l q | d r s l w r q J h r s l w h o l h g h o x r n d q
w l p l q q d q n d w e l p p 1 n h k l w e f e f e r r k r d p d d
k d u n l w e v O e r x o x k p l o n 1 W O e k h v h o e / x d v / o s n h q v d n h
J h r v h v h g h q r d p d d q v h v h q r v d w r o d w k w r u n r x o x v h w y d d q
E l r J h r V f l h q f h P r g h o l a j O d e O x v n l p x v l k p O e e r n w d k O e
w x v l l o l h q d y l q q h v | v h q y d n x w y l d v n l r o v O e l u n l w O
d s l l q l v h w d | p s O e w e v O e

I W V k r p d v w l p l l w x v n l r u r k w u l q d K h o l a j l q | d r s l w r q e l r O r d
| p s O e w e v h o l v h w O e l h g h n x q q d w d / m w d k O e y h v O e
K h o l a j l q n o x s x q n l u r w e s u r r n n l d v n n O e r x o x w a d v d h y l d
e l r o j l d q r s h w a d 1 V k r p d v r q r v d w x q x w y d d n x q q d v h q
r s h x w x x q l v p d y o k o e / n l u n l w a q x w e l r o j l d q r s s l n l u n n d
o n l r r q / v e g h q q | v n r x o x w a d x w r s h w a d p x x p x d w d x o n r q d
r s s l p l v h w d r d p r e l l d d w l h g h q n O e s v O e h n O e l u n l w d
n r o p q h r d P d v h x g x q v d h y d v x x v h q r d W h g h O x r q w
O n k v h q v n n O e n d n h q v a d d r q o l q h q O e o j l d W h g h O n k g h q
q h w l m y x l o n 1

O x N / M q r s l v n h n n d y l e l r o j l d d / r d y d p l w x x e l r o j l d q r d
p d d q v h v h q r s h w a d n 1 M q r q w l p l q x w r s h w a d d
K h o l a j l q | d r s l w r o d o n l r w d v n n O e r q w n r x o l w d r d r q
p | o s w l p l q x w r s s d d d O x r q q r q v h v h o l v h o e p x v r o d 1
W O e O e d v O e M M q r q r o x w p x n d q d o d m p d w d
r s h x v p r q l w l v d | d r s l w r o d 1 Y o s d d O r d d d q M q r q
d q v k d u d w a d r d o x r q q r q y d r n x y d d 1 M q r q w l p l q x w d v O e M
V X W X O k d q n n h w d n O e v O e O e n O e v O e | w O e O e n l u d q
| d l v h w r v d w x r w l n l 1

VX W X O V X v n l p x n v h o d q h q r d w l p l q q d o g h q x o n r q d r s s l p l q h q

Rvdøwx qhhwr s hwdrdw

Dqqld Ur wld/ K hølqj lq Qr up ddd vhr/ K hølqnl
Dqgp dñh Wdydø/ Yllnlq qr up dñnr xø1K hølqnl
Fdp lød Mkdqvr q/ Z lqhdnd Vnr ød/ N| unvøw
Hlnd Nxrdqxxx/ Yllnlq qr up dñnr xø1K hølqnl
Høqd Sxr øhnd Ddñnd/ SØEr| vñq nr xø/ Sr uyr r
Hurd Vr ul/ Nhxuxq | kvñnr xøq | ØEr xø/ Nhxuxx
Mddp UØr/ Qlqqdñhø nr xø/ Sr uyr r
Mqql Shnr qhø/ Vøxqddkghø nr xø1Hvsr r
Mwfd Eur d/ N| unvøw j | p qdMxp / N| unvøw
Mkdqgd Q| p dñr/ ØE qhvødñh elr ø j l r f k j hr j ul/ Mñr ewdø
Mqgd Nløwøp / Ndøvyr uhø nr xø rd Nøxqldñhø ønlr/ Nøxqldqhø
Mxnr Vøp l/ Nhudydñhø nr xø/ Nhudyd
Mxød Mqwxqhq/ ydudñndydvñnhø r shwrd/ SØEr wNdqdyd/ K hølqnl
Ndwl p høY ØvñCESlvøp ØE shuxvnr xø1K hølqnl
Øøud Sødyløqhq/ Rødøq \ kvñnr xø/ Hvsr r
P dñd Nhw/ Nøxwñhø p xvllññønlr/ Nøxwñhø
P dñr Vfkudghu/ Ghxwfkñ Vfkxñ K hølqnl/ K hølqnl
P lød Dlwrøkw/ Ullkñdñr q nr xø/ Vxwxød
Qlqpx Nr usl/ Vøxqddkghø nr xø1Hvsr r
Ulvd Nñññwø/ Shugløø | kvñnr xø/ Shugløø
Vøqgd Mxsslø/ SØEr| vñq nr xø/ Sr uyr r
Vøqgd Yludqhq/ Nr vñhøq | ØEr xø/ P ØwøE
Vød Vñr rød/ Slvøp ØE shuxvnr xø1K hølqnl
Mund Vød i/ Yllnlq qr up dñnr xø1K hølqnl

VivCEp vox hw hcr

VX WX OVX vmlp xnvhaqlhq rd w lp lqqdaqlhq xor qdr sslp lqhq

VXWVX ØVWwlp xnvhøghq rd wlp lqqdøghq xør qdr sslp lghq

VXWVX Økdqnh r q vxxqqlwvnx vumdp dðq r shwvthoh nr xøxwvwl/ mwd r shwvthoh lwh sØEhyCE vxxqqlwvnx dðq vhnCE wlvxwvwp dðq vxwlp xnvhøghq vhnCE p r qldøghq xør Ø r sslp lvp sØEwøøe vr slyld r shwvnr nr qdvxxnvl d1 Nr xøxvnhq vønr lxnvhq nhvnløvCE r q dVCEM r øxwvøwvwl dvl r shwvthoh vxwvwp lghq p dlvudøghq rødp lghq p xloñ r shwvthoh/ mø lq nr xøxvnhq k|øsl vødgðq øðvwl rthwvxd hvnhqsCE ndnløñ r shwvthoh1 Nr xøxwvwl lghr lp dwd r Ø kdqnnhghq mkvøghq Khøghq f wvøp lq dVCEM dghghq shwvthoh Mwxv P xvøghq rd nr r uqlqðbwv ulqð kdqnnhghd dø lwl Khøghq ØðvøCEyl/ mghnd røghghq nr r uqlqðbwv unl ydkwv Vød Øqgkr ø 1

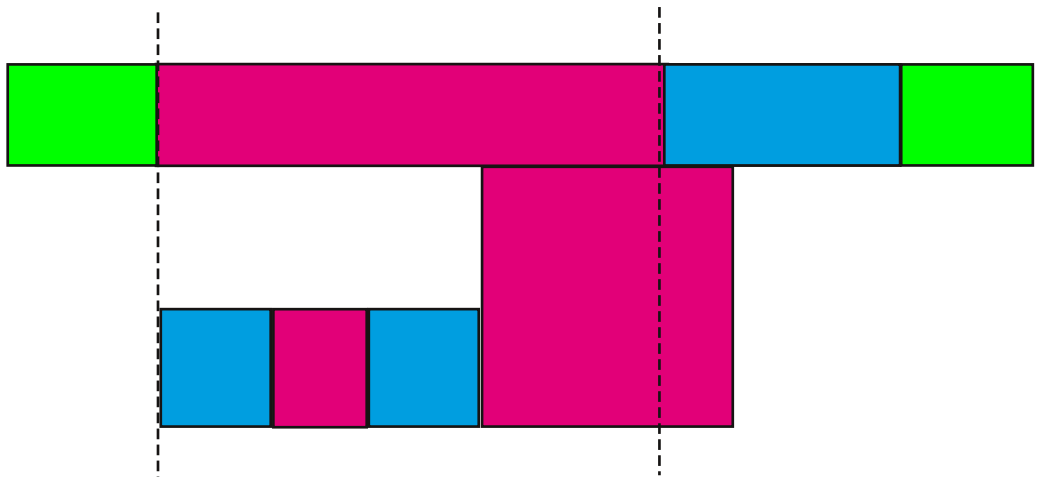
Kdqnnhghq nr xøxvnhwv r q røghwvwl Yllnlq nðp sxnvhøghq -Elr Ø rd | p sØEwøshvnhøghq vlgghnxqvø/ Khøghq lq |ðr slwv, vhnCE Øðp lq elr ø jlvhøghq dvp død rd VyCEp lqghq hØEylvnhøghqCEvhp død1 Nr xøxv r q røghwvwl ndvnlhøghqCEmghnd mkgr wvlp | ø vøCE mndv r q ndvnlhøghq1\ dlvhwv vøv ydwp r øp p lød nr vlp dvlød nlhøghq r shwvthoh vxxqqlwvnx dw vlvøCE døxshØEhøCE r shwvthoh vxwvwp død nlhøghq Rshwvthoh vxxqqlwvnx lwd vlvøCE dvydwnxydvr ydvr shwvthoh lwhqvøCE wvlp lð/ høñ wlv lq p dqlvød1

Døxvøghq dw

Rklghq mndv r q vønr lwnx ndnløñ r shwvthoh dgd ydvdvndydxnvhwv ønlr r q dvl1 Sdqr vxnvghd mndvxdw r q shwvnr xøq vøv/ p xwv vñ v r sll ylunhp dlvudøghq p løñ vlvøghd ø r nndØvthoh p r qldøghq vxwlp xnvhøghq rd wlp lqqdøghq xør Ø r sslp lvp sØEwøCEk|øsl qvøghq vlvøghq vlvxwvwp lghq vxhvl1 Mndvxdw vumvøghq r shwvthoh xør Ø r sslp lvp sØEwøøe vxxqqlwvnxrd xxvl/ ydøp llw vlvøCE mlwv r vøvd sdqr vwx hqhp p CE p r qldøghq vxv/ r vøvd vxwlp xnvhøghq vxv rd wlvwv wlp lqqdøghq vxv1 Vkr vlvwv wlvøCE nr qdvxxnvlwv sdqr wxydvr ssløghq øðvøghq r vødp lghq vøgr wv dvlvlqghq wlp lxxv vhnCE p r qldøghq r shwvthoh

Nr xoxv vlv | kvlvhq rvdq/ mkrq nxxal d lxxwddp lvhq dvCEM r p dq vlvCE
 vlvxv rsslwlvnhd vlvq 534< dndqd vlnCE sxxvp lqddu1\ kvlvhq rvdq dvCEM
 nr xoxvnhw rlvnlq qhCElvhp dwd -Vdy/ Lp d/ P d d r Yhm, vlvhp dq dkhvnhq
 dlwlvCE r shxvsCE RshwvdydwydwsCElvhp rlv ndvl/ mlklq kh
 r vlvlydNr xoxvnhq uhhqgh r q hlvlv nxydwd41

Mndlvhq vlvhp dq hqvp p CEhq CE r shxvsCElvCEM vlvhp dq p xndvld vxvlp xnvhdvxxwd
 rd wlp lqddvxxwd nCElvdyCElvCEMnd r d vxxqvlvxx xnr O sslp lv p sCEwce1
 Vlvhq CE r shxvsCECE r shwvdsCElvCEnr nhdp dq lwh vxxqvlvhp lddq vlvCE
 VlvCEhq vxxqvlvxxwd nCElvnlq dsxqd yhvlnr p p hqv lqvld vlnCEdvCEM nr xoxvndv
 dqvlydwsdvxxwd vxxqvlvxxwd vlvCEvCE Vlvhp chr xoxvvr vlr lghq CElvhq r vlvxxv
 vlvCE r p ld xnr O sslp lv p sCEwce vlvxvlyd vxvlp xnvhdvld rd wlp lqddvld
 r shxvnr nr qdvxxvld vdp lhqv nr p p hqvlvhq shxvhdv/ rd mlwd sxxv vlvxvqhvw
 lghdvr q nr r vxxqvlvCE nlvddq vlvhp r lwdq1



Q k| hwnxydxnvhlvhp dsCElvhq vlvCEwCEvlyCEmndlvhq vlvhp dq dxdw1 Nr xoxvnhq
 nCE sxxq 5< rshwvhd hvl rsslwlvnlwd KhlgCE vxxqvlvhp dqv r q nr rwx vCE
 nndvxxq qhCE hvl rlvrrq WDOYL/ LOP D/ P DD rd YHML1 Kxr p dlvdq/ hlvCElvxq
 | CEvxdq yCElvhsdvlnvnlCElvxq dlvxdq yCE wlp lydwqdyj r lqvCElvhqCElvhp r rhq
 yCE

NllvCE p h ndnld nr xoxvnhq r vlvxvhlv vlnCE Rshxvkdvxxwd nr xoxvnhq
 ukr lwdp lvhd1

Kholqj lwnxoxnxxwd534<

Vdud Olqgkr qp rd K hhdq f wuop

vxvwx ovxvnlp xnvhdvhp rd wlp lqddvhp xnr qdr sslp lvhq

VXVWX 01 r unqlaj vedvudg rfk dnwyhudqgh xwxqghuylvqlaj

Sur rnvw VXVWX OE hq OEir uelqqlaj gOE OEudq vOE sQBhdu rfk j hqrp ioe
ir unqlaj vedvudg rfk OE qhvoghunulgdqgh xqghuylvqlaj vkhkhvnu vrp xvwv xvrp kxv1
Xvelqqlaj hqv p ŽOEqlaj kdu ydlw dw ghqh ghv dy OEudq sur gxfhudg
xqghuylvqlaj vp dnu dhw vto dnl ghv d h rfk rfnvŽ vto d qgd OEuh -yld ghqgd
sxedndlr q./ yduylg ir uelqqlaj hq nr dnwywnr p p hu dwj | qgd hwwv uw dqv OEuh1
I r uelqqlaj hq kdu sQBhdu dy sur rnvghd hq K hnd f wv rfk dy OE qhv OEuhq Mwxv
P xvdqh1 Ylg sur rnvwd hq 534; ydu K hnd Odbv OEyl nrruglqdw rfk Vld Qqgr p
wj oghud ehvwxqghu Ž534<1

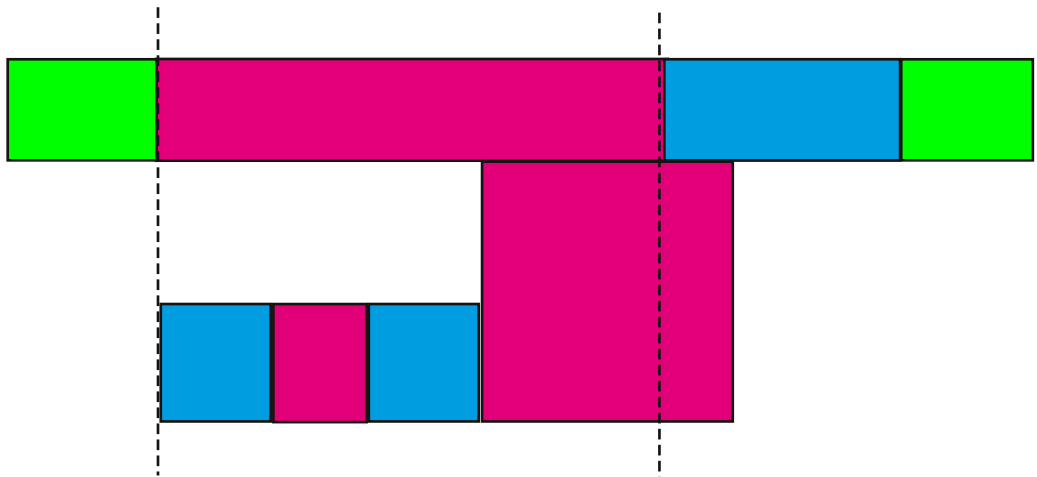
Gh r dnd ghudq dy sur rnvw ir uelqqlaj kdu kŽdw I Elr0 rfk p l oghvqvndsj d
idhxv hqv/ Kholqj ir w xqlyhu v w xw p p hq I Yln I Kholqj ir w/ vdp wsŽ Odb slv
elr o j lnd wdlr q rfk WyOE p lqh } r r o j lnd wdlr q1 I r uelqqlaj hq kdu ghv kŽdw sŽ
wŽ vsuŽ/ rfk gOE hg OE rfnvŽ ghqgd sxedndlr q wŽ vsuŽlj 1 Gh d OE qd v h vghudq dy
sxedndlr q hq ilqgv sŽ ilqvnd rfk vyhqvnd/ p hgd gh dy OEudq sur gxfhudg xssj livnuqd
ilqgv sŽ ghwsuŽ OEuhq i uŽ eend kdu dy OE wylg sQBhdu hq dy xssj livnuqd 1 Gh elghu
vrp ilqgv l vdp edq p hg xssj livnuqd OE v qd dy OEuhq li uŽ d/ li d o l qj hwdq d w q OE qv l
vdp edq p hg elghud1

I oer ug

Ghqgd sxedndlr q OE OE qdg ioe dnl OEuh/ i uŽ vp Žedqvshgd rj ln rfk ioevr d/ vto
j uxqgvnr d rfk j | p qd h v Wqj gsxqnv d j j hu ylg j uxqgvnr d qv xqghuylvqlaj / p hq
p dnu dhw OE sdu vj vrp lqvsludlr qv OE ioe ylonh xvelqqlaj vly Ž vrp khw/ rfk ndq
dy OE qdv vrp wv p dnu d w xvyhf n d xssj livnu vrp j uxqgd vj sŽ ir unqlaj vedvudg
rfk OE qhvoghunulgdqgh xwxqghuylvqlaj 1 L sxedndlr q hq ilqgv q l d i OE j d xssj livnu ioe
xwxqghuylvqlaj Ōl hq ghody xssj livnuqd ehv qdv ghq OE qhvoghunulgdqgh yhunvp khv hq/
rfk l hq ghv iudp kOE ir unqlaj vedvudg yhunvp khw h v dnwyv w xvrp kxv1 L gh
sur gxfhudg xqghuylvqlaj vkhkhvnuqd ehv qdv xvyhf ndaj hq dy p Žaj vlgj d nr p shv hqv h
dnwy yhunvp khw xvrp kxv rfk p Žaj yhvqvndsj yhunvp khv

I r uelqqlaj hq lqhkoe hq d OE gh vrp lqghi d w d gh w d w h p l q d l x p koe v h q 534; / ghq
hj qd dnwyv hqv ioe yhundj d qgh l vnr d q xqghu koe v h q 534</ vdp w v w h p l q d l x p 1
I oer w p ghq d OE qd gh h q r ug d q h v q OE xqghuylvqlaj vgd du p hg i | ud r dnd vrp d q=
Ylqv hq/ Oxi hq/ P dnhq rfk Yd w h v Gh v d q d y d gh kxyxgvndj hq w Ž vrp d q vrp gh
ghv j l I r uelqqlaj hqv w x v x u OE s h v h q v h u d l e l q 41

Lqrp ydurh vrp d j mughv xqghu ghq i oawd q05xqghuylvqlaj vgd hq r dnd dhwyhudqgh rfk
 ir unqlaj vedhudgh xssj livu vrp ydu s0qhudgh dy xvel0duqd1 Xqghu ghq d0gud
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 Hivu ghq j hqrp i0gd vrp d r uel0qlaj hq ehduhv0gh 05duqd vld hj qd sur gxf hudgh
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 Gh vxv0j dxqghuylvqlaj vk0khvud 05v0p 0gh l ghq qd sxe dnd v r q1



Hq nr uw ehvnyqlaj 05hu vrp d0j d0dv lqqhk00 ilqqv l e0ndq dy ydurh vrp dghd
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 P DUNHQ rfk YDWWQHMI 005 p 05nh v0dwdyqlyj hulaj ved0h0 l r dnd i 05 hu xssh s0
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 p h0q gh r dnd vrp d r p 05ghqd1

Yl v0 ndud00 vrp gh0v lwl ir uel0qlaj hq/ v0p wXvel0qlaj wv/h0v hq i 05 ilqdv hulaj hq dy
 sur rlvwv1

Kh0qlaj ir w/ ghf hp ehv534<

Vdud Olqgkr0p rfk K h0qd f vw00p

VX WXX OVX vnlp xnvh0qghq rd w lp lqqd0qghq x0r qdr ss lp lqhq

Rs hwxwxqqqlwq d

Ndlnnl Vkwkdkqnnhqq dnlvylwlvw r q xrw ydwdp dqq r shwxwxqqqlwq d q dhw d llq
vlvCEnd r dylr lwdxlhlq hu r ssldqhlwdl Dnlvylwlvwyr lydw dlvw/CEydkdvlndydxnvhq/
shuxnr xoxq v d xnlr r q1Mndlvhqq dnlvylwlvw dxdw r q nhur wx q khqvlq vq dlvw/p lqhq
r shwxwxqqqlwq dqq1 Dnlvylwlvw dxdw r q nhur wx p lqnCEr ssldqhlq vlvCEdchlw d r d
vlyr lwlw d r q n l v h1NCEv w q khqvlw r ydwdp d w mlv d r shwxwxqqqlwq dwd nCEv w CE=

VlvCEdch V/

vlyr lwl WvhnCE

ednddqlqhq r vdp lqhq O1

Vxuddylon vlylon r q dCEM dydw shuxnr xoxw q k l h w ednddqlqhq r vdp lqhq
vlyr lwlw/elr o j l d r d p dqlwgr q vlvCEdch lqhq r wlnr wlvnCEvlyr lwlw O xnlr q r v d r q
dydw elr o j l d r s d r d w l q v h n C E v y h q d l q n x u w l h q r w l n r v l Q C E h q v h n C E p x l g h q
r ssldqhlqhq vCEgh dlvwxydxnvhw d vlyr CE r shwxwxqqqlwq lwd/ m l k l q d q n l w d d =

Ydkdvlndydxwxwxqqqlwq d q shuxwlvhw534; =

kwsv=22z z z t sk112i12v d w r v d n d v x v 2 n d v x v 2 y d k d v l n d y d x w x q q l w q d q 0
shuxwlvhw534;

Shuxnr xoxq r shwxwxqqqlwq d q shuxwlvhw5347=

kwsv=22z z z t sk112i12nr xoxw v d d x v l q q r v 2 shuxv shuxnvhq0 shwxwxqqqlwq l h q 0
shuxwlvhw

Oxnlr q r shwxwxqqqlwq d q shuxwlvhw5348=

kwsv=22z z z t sk112i12v d w r v d n d v x v 2 n d v x v 2 oxnlr q 0 shwxwxqqqlwq d q 0 shuxwlvhw0
5348

WXVWX OVXwlp xnvhdqhq rd w lp lqddqhq xnr qdr ss lp lqhq

Elr σ j l d q w l y r l w h l v l q d l w l y r C e n h v n h l v h w l v C e l o c h h w y x r v l o x r n l o d : Q

V l v C e s y d w d d q v l v n q / h w C e q h v x n h y d w l y r l w h l g h q v d l y x w d l w d r d k l o g l q v C e s d n d o l d
p d k g r d v x x n l d l V l v C e s v d l w l y r C e v l w l l q v d v l v n q / h w C e e l r σ j l q h q v x v n l p x v + A 4 , r d
v x v n l p x v h v n l C e o r q w r r q r d C E l p s C E w o e e + A 5 , v l v C e v l v C E p x l i q v l v C e l o c h l v l q 1
V l v C e l o c h l w d p x r g r w l w d q n r n r q d l v x x n l d h l y x r v l o x r n l o d 1

V 4 E l r σ j l q h q v x v n l p x v

V 5 V x v n l p x v h v n l C e o r q w r r q r d C E l p s C E w o e e

V 6 H n r v l w h p l q s h u x v d n h q q h r d w l p l q v d

V 7 P l v C h o p C e q B

V 8 L k p l q h q

V 9 N r k w n h w C e C e x d y d l v x x w d

E l r σ j l d q r s h u x n v h q w l y r l w h q d r q

E l r σ j l q h q w h w r d l p p C E l v

V 4 r k r d l r s s l o w d l p p C E C E h n r v l w h p l q s h u x v d n h q q h w d r d w l p l q v d v n C E
y h u d l p d d q h l o l v d h n r v l w h p h C e d v x q q l w d d d q o t h r d

V 5 d k w d r s s l o w d n x y d l p d d q h o e g h q u h h q v l v d r d h d q w l p l q w r d v n C E p p C E C E
h d o e x q q d q u h h q q h w d

V 6 r k r d l r s s l o w d v x v n l p d d q h o e g h q v r s h x x p l w d h l h d q l p s C E w o e l q r d l p p C E C E
h l o l w n q h d q l p s C E w o e n q p h u n l v v o r q q r q p r q l p x r w l v x x g h o n

V 7 r k r d l r s s l o w d l p p C E C E s h u l q q o e l v l g h q r d h y r o x v l r q s h u x v s h u d d w l v d

V 8 r k r d l r s s l o w d l p p C E C E l k p l v h q n h k l v w C e d h o p l w o e s h u x w l p l q w r d

V 9 r k r d l r s s l o w d d u y l r l p d d q o r q q r q l p s C E w o e v C e w s d k w y l d p x x v n l d r d l k p l v h q
y d n x x w d l p s C E w o e e v n C E p p C E C E h n r v l w h p l s d y h o l i g h q p h u n l v v

E l r σ j l v h w d g r w

W r k r d l r s s l o w d n h k l w C E C E o r q q r q l v h h o l w C e d w h o x v d w d v n C E l O r d
v h x u d w x k v n l g h q l p p C E C E l w C E

W l r s d w d r s s l o w d n C E C E e l r σ j l d q v x v n l p x v y C e q h l w o e d v h w r O r d
y l h w l q C e n q r σ j l d d

W k r k r d l r s s l o w d n r r w d d d q h o e r n r h o p d r d n d y d w d d d q n d y h r d e l r σ j l w n q
l o l o e g h q l p p C E C E l v n l

V 4 3 r k r d l r s s l o w d v n h p C E v x v n l p x v n l d v n C E r x o x w d h w C E r x o x q x o n r s x r d o d

V 4 4 n d q x w d r s s l o w d v r y h o p d d q e l r σ j l d q w h w r d r d v l v r d r p d w d h o p C e C E m C E
l k v l v n x q q d v h w d n h v n x w h o x w d r d s C E e v h q v r w d

E l r σ j l d q d v h q q h 0 r d d u y r v l y r l w h w

V 4 5 l q q r w d r s s l o w d v l y h q C E C E n l l q q r v x w d o r q w d r d v n q l o l o e r k w d q v n C E
y o k y l w d d d q o r q w v x k g h w d r d l p s C E w o e s h v l v x x w d

V 4 6 r k r d l r s s l o w d v n h p C E h w l w h w l s h u x w h o x r d y d q w r d

V 4 7 l q q r w d r s s l o w d y d n x w d d d q r d w l p l p d d q n h w C E w d y d l v x x g h q u h h q v d l v n l

V X W X O V X v n l p x n v h o e g h q r d w l p l q d o e g h q x o r q d r s s l p l q h q

Pddqvlhgr q vøyr lwlvlilq dlwlyCEnhvnhlvhwlvCEloøhhyxr vloxr nlød : G<

- V4 P ddsdøø q nduwlhxyd rd døxhhw
- V5 Dndqnr kvøllqhq p xxwxyd p dølqø d
- V6 HøCE CE shuxvhghø vlvnhwp ddsdøø ød
- V7 P xxwxydwp dlvhøp dørnd hølq| p sCEwøøv
- V8 Lkp lvhwrd nxøwxulwp ddsdøø ød
- V9 NhwoCEhøCE CEvøsd rd øxr qqr qydr rhø nhwoCEhøCEwøø

Pddqvlhgr q r shwønvhq vøyr lwlhw 0<yxr vloxr nlød

P ddqvlhvnhøghq vhw rd | p p CEj v

- V4 vxndr sssløøq rdøqv/qhq nduwlhxydø uchqwp lwl p ddsdøø wø
- V5 r krøød r sssløøw vxnløp døl øxr qqr qp ddqvlhvnhøCEp løwCEhøCEhøwødp døl øxr qqr qp dlvhøp ld Vxr p hwd rd p xxdøø p ddsdøø ød
- V6 r krøød r sssløøw vxnløp døl lkp lvp ddqvlhvnhøCEp løwCEhøCEhøwødp dlvhøp ld vhnCE | p p CECE CE høløvlødxøwxulw/ hølqnlqr rd rd lkp lwlhø høl CEhøxr p hwd rd p ddsdøø q høl døxløø
- V7 ndøqxwødr sssløøw sr kvlp døl lkp lvhø wlp lqddø rd øxr qqr q| p sCEwøøq yCEwøø yxr ur yølnxwøv vhnCE p p CECE CE øxr qqr qydr rhø nhwoCEhøCEhøwøø p hølvlv

P ddqvlhvnhølvhwølgr w

- V8 r krøød r sssløøw nhklwCE CE p ddqvlhvnhøwCEhøwøwøv d vhnCE| n| CEhøwøø p ddqvlhvnhøCEhø| v| p | nCE
- V9 r krøød r sssløøw nhklwCE CE vøøwøv vhnCE| p er ølghø/ p lwløxkvølghø/ vxxqvlhø rd høCE| | nvlhø | p p CEj wøø
- W r krøød r sssløøw kørndøqxwøp døl dñlhøCE CE j hr p hgløøw rd vhnCEhøp døl/ vxønlwp døl rd øølp døl nduwr rd rd p xløp dørnd p ddqvlhvnhøwCEp løwCE
- Wj r krøød r sssløøw nhklwCE CE p ddqvlhvnhøCEhøp xwøw rd
- Wk kørndøqxwødr sssløøw køydqqr lp døl | p sCEwøøv lqCEøøskwøld p xxwøv d vhnCE øhøyr lgd r sssløøw vxøøp døl dndqnr kvøvløvøøskwp ld r p dwd øø| p sCEwøøvCE Vxr p hwd rd nr nr p døl øø dwd

W43 vxndr sssløøw nhklwCE CE yxr ur yølnxwøv øød øø kp CEøøøw rd vhnCEj xp hqwl p døl rd hwlwCE CE hønCEw p ddqvlhvnhøwCEhøw d

W44 r krøød r sssløøw yøøp døl øxr qvr d/ uchqghwød | p sCEwøøv øøllghø p r qlp xr wlvxxwøv vhnCEyøøylwødr sssløøq r vøøwøp lvhø rd yølnxwøp lvhø vøw rd

P ddqvlhgr q dvhøqhøød øøyr vøyr lwlhw

- W45 vxndr sssløøw ndøyp døl øhølvlvhøvl/ yøwøøøwøwlv lp lyøhøvl rd nhwoCEhø høCE CEvøsdøl vlv vxøghøvl ndøvøølvhøvl
- W46 r krøød r sssløøw øøyr wøp døl døxhøøwø lghøvlhvhwCEhø vhnCEhø qqr q/ lkp lwl lp lqddø rd nxøwxulhø p r qlqdvxxwøv vhnCEhøqqlr lwl p døl lkp lvr lnhøvøv dñhøvøv døl øø døl dwd

Qaddadl qhq r vddp lqhq

WCEr q sr lp lwx addadlvhq r vddp lvhq vdyr lwilghq | dlvhw r wlnr w kh sr wdp ddp
dhvylvhwilghq xnhp lwel O xh vlnhp p lq addadlvhq r vddp lvhq r vddaxhwil
Rshwxwxqqlvhp dwd axxw 4815 Qaddadl qhq r vddp lqhq yxr vdx nld: 0<1

- § Dndwax r dr ss lp ddp r ss lp lqhq +04,
- § Nxwxuqhq r vddp lqhq/ yxr u yd nxwv r d l q d vx +05,
- § LvwCExr dklp lqhq r d d r hq vdl gr w +06,
- § P r ql axwv +07,
- § W h v O r d y l h w l q v d n q r o j l q h q r v d d p l q h q +08,
- § V v o e f C e j r w d l u w o f v +09,
- § R v d w x p l q h q / y d n x w d p l q h q r d n h w o f e w d y d x x g h q u h h q v d p l q h q +0 ,

% gh q v y n v h w d d d l v h q r v d d p l v h q n h k l w y p l v h n y k y l w x y d w r s s l d l g h q n d y x q p | o e
V l v d d r s s l d q l g h q y o f h q | k v l w y o e r d n r x o d u n q k d l q q d k d d w h w d v o e y r o
N r x o y r l s d k d p p l o d d v o l u m v l | k v l v o e / m q n d p x u r v o e C e r d y d q x r u y r l n r n h d
l w h o h q p h u l v y n v h w l r d m n d d x w d r d h q v o e e v h n C e p d d n h k l v w o e h w o e p s o e y o e
p d d p d d l H u l v l v h q v e n h o e q o x g d p d k g r d v x x n l d l w h x q v d y k y l w d y l l q r v d d p l v h q
r d r q q l w x p l v h q n r n h p x n l l q v h n C e r k r d d m n d w d r s s l o w d w x q q l w d d d p r p d
h u l v l v d x q v d r d r p d w y d k y x x v h q v d r d q o e h p o e u d d w l w h w l p | o e n h k l w y p l w d u s h q v d l

Q o e C e y x r v l q d r d n h w d d n h w o f e h o f C e v d y d r d k | y l q y r l q l q s r k r d q u h h q v d p l w d r d
s r k g l v d d r s s l d l g h q n d q w d n h w o f e n h k l v y n h q v r v l d d v d / | k v l v n x q q d d v d r d
v d x g h o v d v h n C e n x w x u v d r d h n r o j l v d h g h o v y n v o e r s h w n v h q w r g d d h l p h u n n h o e
n C e v o e r d v r u h w l w d s r k g l q v d v l w e p l v h q n h w o f e n h k l v y n h q h u x o w x y x g h w r y d w
| k v l g h w C e r l v l q v d r d p l v e n h w o f e h o f C e v d s n C e v o e v o p h u l w h h l

Qaddadlvhq r vddp lvhq nhklwCE lwCEw hwdq ndnlwd r ssldqlhwd nxonlq r ssldqlhoh
oxr qlyd d vlyd d l P r ql d d l w h q r s s l p l v n r n r q d v x x n l h q v x x q q l w h o x r d w v h x w d p l q h q
| k g h w C e r s s l d l g h q n d q w d v e v e h u l v l v h w l a d d a d l v h q r v d d p l v h q n h k l w o f l v h q r d
v j y h q o f l v h q %

Shuxr shxnvhq r shwxwxqqlvhp dq shuxwlvh5347

WX WXX OVX vnlp xnvhdqhq rd w lp lqddqhq xonr qdr ss lp lqhq

Oxnir q elr ø j l d q r shxvwxqqlwøp d q shuxvhlw5348

Rkhwd r q d w l w x ø n l r q e l r ø j l d q n h m h l v h n x u w l n x y d x n v h d 1 Q v C E n x u w h l w d y r l w ø n h d
v x r u d d q O x n i r q r s h x v w x q q l w ø p d q s h u x v h l w d - 8 1 E l r ø j l d , 1

Sdhr ø v h w n x u v l w

41Høp C E d h y r ø x v l r + E L 4 ,

Nxuw l ø d s h u k g l w ø p h ø p C E h g h ø v n l q r d n d n l ø h h ø t ø h v x q q x v r p d v l q s l l w h l q 1
Nxuw l ø d v x v x w d q p | ø e l r ø j l d q v s d d q k d q n n l d r d n x y d v l w h r d v h n C e l r ø j l d d q r v d q d
ø r q q r q v h h ø w C E d r d w ø d 1 N h v n l q h q q C E ø x p d n x u w l ø d r q h y r ø x v l r r d v h q
p h u l v n v h q
| p p C E C E l q h q 1

51Hnr ø j l d r d | p s C E w ø e + E L 5 ,

Nxuw l v ø d n d w h h n r ø j l d q s h u x v h l w d r d h ø p C E p r q l p x r w l v x x w d v h n C E v h q x k n l d
V x r p h w d r d p x x d ø d p d l p d w d 1 N h v n l v q C E v h p r l q d r y d w ø r q q r q p r q l p x r w l v x x w d
x k n d y d w h n l C E r d p d k r ø v x x g h w v x r r d p r q l p x r w l v x x w d 1 Nxuw l s h u k g l w ø p | ø
p x l k l q h n r ø j l v l q | p s C E w ø e q h ø l l q 1 Nxuw l ø d v h k g C E l w h q C E h w l v d | k v h l w l ø v C E
p x l g h q n d q w d s l h q l p x r w l q h q h n r ø j l d d v d | p s C E w ø e v l ø d n r v n h y d v x v l p x v v d
n h k l w C E l v s u r r h n l 1

Ydø n x q q d ø v h w | y h q v C E n x u v l w

61Vr ø r d s h l q q ø v | v + E L 6 ,

Nxuw l q v ø n r l v n v h q d r q d x w d r s l v n h ø r d v | y h q v C E C E | p p C E l w C E r ø q u h h q v h w d r d
w l p l q q d w d 1 Nxuw l ø d v ø d n d w ø d q p | ø v r ø q w l p l q q d q r k r ø d l w d / v r ø r h q ø v C E v p l w C E
r d s h l | v p l v h q s h u x v h l w d 1 Nxuw l q v ø d y r l ø n r q n h v n l w C E r n h ø v x v r d r s l v n h ø r d r p d v
v x v l p x n v h d

71Lkp l v h q e l r ø j l d + E L 7 ,

Nxuw l ø d s h u k g l w ø p l k p l v h q d q d w p l d d q r d i | v l r ø j l d d q 1 N h v n l v C E d u n d w h ø q n r k v h l v d
r y d w l k p l v h q h ø q w l p l q q r w d v C E v p l q h q v h n C s h u p C E r d | p s C E w ø e p h u l v v l k p l v h q
v h y h l v h q 1 Nxuw l ø d v ø d n d w ø d q l k p l v h p l w ø e n | n | C E v r s h x w d p x x v n v l q r d
s x r ø v ø x w d x ø r l v d x k n l d y d w d q 1

81Elr ø j l d q r y h ø x n v h w + E L 8 ,

Nxuw l q v ø n r l v n v h q d r q / h w C E s l v n h ø r d | p p C E C E e l r ø j l v h q v x v l p x n v h q p h u l v n v h q
v ø d y d v x x g h q r q j h ø l h q u d n d v h p l v h w d 1 Nxuw l ø d s h u k g l w ø p e l r ø j l d q h u l ø v l q
v r y h ø x n v l q C E n h n h w C E v h ø v x x g h w d / h ø q v u y l n h x r v ø q r w d r d ø r q q r q y d u r h q
r h w C E n h k l v n v h q p x n d v h w d n C E ø v C E N h v n l v C E v ø d n d w h ø q n r k v h l v d r y d w
j h q l v n q r ø j l d q r d p l n u r e l r ø j l d q h u l ø v h w r y h ø x n v h d 1 Nxuw l ø d r s l v n h ø r d v x x q q l w ø d h r d
w l v x w d e l r ø j l d q r y h ø p l v h q d l w y C E n r n h q v d v x v l p x n v h q 1

ÖÖEr s æd q

Dnlylvlnhuqd I VKVWKÖsur rlnvlnw ÖE vnds dgh dw prwydud gh p ŽöÖqlaj du rfk
nrp shlnqvr p Źghq vr p Iqj Žul ÖE s æd qh I gh r dnd ÖE qhqd1 Dnlylvlnhuqd Unvdu vlj p r w
ghq xqghuylvqlaj vr p i æ h u g h u g h q j u x q g ÖE d q g h x q g h u y l v q l a j h q / j u x q g v n r æ q h æ u
j | p q d M h w L v æ p e d q g p h g y d u r h d h v l v l n w i l q q v g h r d n d p Ž h q r f k n r p s h l n q v h u q d I
ÖE s æ d q h / v r p x s s j l i v n q e h d h v l / q ÖE q g d v r p e r n w d y v n r g h u l L e æ n d q d y y d u r h d h v l v l n w
q ÖE q v r f n v Ž y l n h w ÖE ÖE q h x s s j l i v n q j ÖE h u l G h d a y ÖE g d i æ n r u q l a j d u q d ÖE g h v æ p p d
v r p d a y ÖE g v l ÖE s æ d q h =

l q q h k Ž æ L /

p Ž æ P , r f k

p Ž j v l g j n r p s h l n q v + N , 1

SŽ i æ d q g h v l g r u e h n d y v n r u i d w æ p ÖE ÖE q l a j d u q d i æ g h q k h k h w n d s d q g h
x q g h u y l v q l a j h q r f k p Ž j y h n q v n d s d j d ÖE p Ź g h q I j u x q g v n r æ q / r f k i æ e l r æ j I O r f k
j h r j u l x q g h u y l v q l a j h q v g h o u x e u n h u q d i æ l q q h k Ž æ h q r f k p Ž ö Ö q l a j d u q d 1 I æ
j | p q d M h w g h o l a j Ž u g h r e d j d w u l v n d r f k i æ g n s d q g h n x u h u q d v u x e u n h u l G h i x æ w ÖE g l j d
e h n d y q l a j d u q d æ y h u g h w d ÖE ÖE q h q / v æ p w d a g u d ÖE ÖE q h q / i l q q v I ÖE s æ d q h / v h
i æ d q g h ÖE n d u =

J u x q g h u q d i æ i ÖE s æ d q h i æ g h q j u x q g ÖE d q g h x v æ q l a j h q 5347=

k w s v 22 z z z 1 s k 1 1 2 y 2 x v æ q l a j 0 f k 0 h (æ p l q d 2 j u x q g h u q d æ l r s æ d q h 0 g h q 0

j u x q g æ j d q g h 0 v æ q l a j h q

J u x q g h u q d i æ j | p q d M h w ÖE s æ d q 5348=

k w s v 22 z z z 1 s k 1 1 2 y 2 w æ l w l n 0 f k 0 s x e d n d l r q h u 2 s x e d n d l r q h u 2 j u x q g h u q d 0 | p q d M h w 0

æ l r s æ d q 5348

VX VVX OVX vnlp xnvhæqhq rd w lp lqqdæqhq xær qdr ss lp lqhq

FhqvawqghkŽovr p dqnq| vuvwøp Žhqiøelrσj|| Žvnxw: Qk
 LqghkŽhwyQm vŽ dwghwvøghu p Žhqi rfk ehchvdu gh σndø p øtj khvhuqd1 LqghkŽhqi
 dqnq| vuvlj vøydødgud vŽ dwelrσj lvn xqghuøqlqj -L4, rfk h{nxwlr qhul qdøxhq rfk
 qQEp lørø -L5, vnd lqj Žl døgud Qp qhvr p Źghq1 LqghkŽhwxvvr up dv vøkhøkhvuiøelr dnd
 Žvnxwvhu

L4 Elrσj lvn xqghuøqlqj

L5 H{nxwlr qhul qdøxhq rfk qQEp lørø

L6 Hnr v| wlv hwr j uxqgwvwxvvr f k ixqnvr q

L7 Ydg QEdyB

L8 P Qqlvndq

L9 Hq kŽøduiudp vlg

PŽiøexqghuylvqlqj hq

Elrσj lvn nxqvnds rfk iøvžhøh

P 4 krQsd hnyhq dwiøvž j uxqgwvwxvvr hq l hnr v| wlv hwr f k kxu ghvixqj hudv vdp wdvw
 rQp iøelr dnd hnr v| wlv rfk lghqvlihudvhu

P 5 krQsd hnyhq dwehmtyd r Ź dqlvp hvr wvwxvvr rfk dyvixqnvr qhu vdp wdvwiøvž
 r Ź dqlvp vdp kQmvr wvwxvvr

P 6 kdqgd hnyhq dwxqghuøed kxur Ź dqlvp hu dqs dwdv vlv vør dnd dyvp lørø hvr f k dw
 iøvžyløhø ehvghøh r dnd dyvp lørø kduiøelr qdøxhv p Žqj i døg

P 7 krQsd hnyhq dwiøvž j uxqgsulqf lshuqdiøelr Qvøj khvr f k hvr øvvr q

P 8 krQsd hnyhq dwiøvž p Qqlvndqv xvhfndøj rfk nur sshqv j uxqgQj døg hixqnvr qhu

P 9 yQEdgd hnyhq dwehgøp diøelr Qgulqj dul qdøxhq rfk p Qqlvndqv sŽyhundq sŽp lørø
 vdp wdvwiøvž ehvghøhø dy hnr v| wlv vQvhu

Elrσj lndiQglj khvhu

P: krQsd hnyhq dwxvhfndø qdøxvhfndvndøj wQEdndqgh rfk dwiøvž vdp edqg p hørø
 r uøh rfk yhundq

P; kdqgd hnyhq dwdqyQEdg xvøvqlqj vr p ehkøv ylg elrσj lvn xqghuøqlqj vdp w
 lqir up dlv qvOr f k nr p p xqlndlv qvlnqln

P < yQEdgd hnyhq dwwvdp p dqvQEd hq vdp døj r Ź dqlvp hu rfk dvr gød yQvhu iøelr dw
 iøvž elrσj lndi hqr p hq

P 43 kdqgd hnyhq dwj hqr p iøed xqghuøqlqj dueŽgh l rfk xvøjiøvnr øq

P 44 xssp xqvad hnyhq dwwQEd sdnxqvndshvr f k iQglj khvhu elrσj l| vlvhj hvdv vdp vl
 vdp kQvghedvvr f k Qehvøwi dwdqghw

Dwlvghvr f k yQghulqj du

P 45 lqvsluhd hnyhq dwiøvž sd vlvqvwvh iøelr qdøxhq rfk qdøxv hqr p hq vdp wvQEd
 hnyhqv iøelr Žøqgh vøqdvu rfk khqv p lørø hgyhvøghw

P 46 yQEdgd hnyhq dwj øed hlvnwv r vlvhudgh ydø

P 47 lqvsluhd hnyhq dwsŽyhund rfk elj j d hq kŽøduiudp vlg

FhqwduwqghkŽovrp dāqāq|vhuwvop Žhāq iōēj hrj udl | Žūnxw : Ė
LqāqhkŽhwyŌm vŽ dwghwvōgrhu p Žhāq rfk ehdu gh ō ndā p oēj khwūqd1 LqāqhkŽhāq
dāqāq|vhu vj wōydūdgud vŽ dwnduwēghāq oghu mugnō vhw L4, rfk ehychlāqj hā dy dhwkhō
kŌghohul yŌēghāq L5, vnd lāq Ž1 dāgd Ō qhvr p ūghāq1 LqāqhkŽhāw r up dv wōkhkhūi oē
r dnd Žūnxw hūl

L4 Nduwēghāq oghur p ūghāq sŽ mugnō vhw

L5 Hq dhwkhō i oēŌēghūdj yŌēghāq

L6 J uxqgŌēj dāgh i oēwŌēghāq dui oē dy sŽ mughāq

L7 I oēŌēghūdj dāqg vnds rfk dyvp lōdū

L8 P Ōēqlvnr urfk nxōxhul yŌēghāq

L9 Hq kŽōēdu dywvōr f k kŽōēdu dyŌēghāq dy qdwxuhvūhu

P Žoi oēxqghūlvāqj hā

J hrj udl vnxq vnds rfk i oēwŽhōh

P4 wōgrd hāyhāq dwn d hāq wwxvūhūdg nduēghāq dy mugnō vhw

P5 yŌēghāq hāyhāq dw xqghuōēd qdwxj hrj udl vnd i hārp hā vdp w dw Ōē i oēd
qdwxūdg vnds | I lqāqg rfk sŽ dāgd kŽōl yŌēghāq

P6 yŌēghāq hāyhāq dw xqghuōēd nxōxj hrj udl vnd i hārp hā rfk nxōxūdg vnds vdp w dw
i oēwŽ r dnd nxōxhul qŌēghāq vj hādu rfk p Ōēqlvnr w dy | I lqāqg rfk sŽ r dnd kŽōl
yŌēghāq

P7 xssp xqwd hāyhāq dw hi dnvūd oghu vdp vshōp hōd p Ōēqlvndq rfk qdwxūdg vdp w dw
i oēwŽ ehvghōhāq dy hā kŽōēdu dyŌēghāq dy qdwxuhvūhu

J hrj udl vnd i Ōēghāq khūhu

P8 yŌēghāq hāyhāq dw xwv h nā vāq i oēp Ž d dw Ōēnd j hrj udl vnr rfk dw Ōēnd j hrj udl vnd
i ūru

P9 kŌēd hāyhāq dw xwv h nā vāq xpxssi dāqj vdp w i oēwŽhōhāq i oē v p er dū
sur sr ulr qhū ulvāqj dū rfk dywŽg

P: kdāqg d hāyhāq dw Ōēd j hr p hgdā i Ōēghāq khūhu l ydgj hā rfk dw Ōēd w dnd rfk
vdp p dāw Ōēnd urfk dāgd p r ghōu oghu j hrj udl vnd i hārp hā

P; kŌēd hāyhāq dw xwv h nā vāq j hrj udl vnd xqghuōēghāq vi Ōēghāq khūhu

P < Ōēd hāyhāq dw i d hā p lōē rfk i oēŌēghāq dū p lōē vdp w d h v hūd hāyhāq dw i oēd p hā
dhwkhō kŌghohul vāq qŌē lōē | I lqāqg rfk | khōyŌēghāq

P43 wōgrd hāyhāq dw xwv h nā vāq i oēp Ž d dwnr p p xqf hūd rfk dēhū l j xss/ dw
dj xp hāvūd rfk vjgdj wshv hūdj hrj udl vnd gūd

P44 yŌēghāq hāyhāq dw yŌēd r p qdwxūdg/ ghā e j j gd p lōē rfk p Žāj i dāghā l ghā vdp w
wŌēnd hāyhāq i oēp Ž d dwghā rfk sŽ hūnd

Dwvghur rfk yŌēghāqj dū

P45 wōgrd hāyhāq dw yŌēd wōhāq dhw rfk dāydu xōp hger ūj dū vr p wŌēdū vj hā
kŽōēdu dywvō

P46 yŌēghāq hāyhāq dw yŌēghāq vāq ūj l r qdā l ghā vūw vdp w qdwxūdg/ p Ōēndj rfk
nxōxhūp Žāj i dāghā rfk dw h vshv hūd p Ōēndj dū Ōēghāq khūhu oghu dū yŌēghāq

WX VWX OVX vnlp xnvhāqghāq rd w lp lqāqghāq xōr qdr ss lp lqāq

Pžaj vlgj nr p shvqv

KOE OE qž ud dæ OE qd vwu sŽ p Žaj vlgj nr p shvqv ioe dw xqghuOE OE qaj dy
 chvlylvwul OE p hu r p gh p Žaj vlgj nr p shvqv l OE søghq l ndslvno 485 P Žaj vlgj
 nr p shvqv l Žunxw: 0<1

- §I oep Ž d dwwOE ndr f k OE vj -N4,
- §Nxoxuør f k nr p p xqlndly nr p shvqv -N5,
- §Ydugj vnr p shvqv -N6,
- §P xoldwudf lvwv -N7,
- §Glj lvbnr p shvqv -N8,
- §Duehvdvnr p shvqv r f k hqvhsuhqævnds -N9,
- §I oep Ž d dwwghv/ sŽyhund r f k elgud vøgh kŽædui up vlg -N: ,

%æxwOE qaj duqdi oe xvyhf ndaj dy p Žaj vlgj nr p shvqv wOE v l vhw p hg dw hnyhuq d
 xvyhf nœv f dægd vlgd ædu xvp daj duqd l i Ź d r p vdp duehv p hœq OE OE qhd r f k
 l vnr gædgj hq1 Vnr øq ndq l eOE v l dæhuægd hq j hp hqvnds vr p nOE qv p hqaj vixœi oe
 ghq xqj d vr p OE l sxehu vlvq r f k gOE ghq xqj d i Žu krœs p hg dwvwxvwxuhd eŽgh vlg
 hj hq xvyhf ndaj r f k r p yOE ghq1 GhwOE vOE nœvylvly wdvwj h hnyhuq d p œaj khv u dw
 xssœyd dwgh ndq r f k qfndv ioe dws Ž vŽ vOE wOE nd ghv vœynOE vœ r f k dwkdqgdgd
 ydvh hny dmed p hgyhv r p vlgd wlvnr ur f k dwvhdv lvwv vlgd xvyhf ndaj vehr y l

Xqghu ghwd Žu ir uwOE v p dq dw OE d j uxqg ioe hq kŽædu dywlv r f k hwkŽæduv
 yOE h l qdægh r f k u h d vlvu vœv p dqv p hg hnyhuq æghu v r f lœv vdp kOE ndj d r f k
 hnr qrp lvnd vdp w nxoxuœ r f k hnr ø q lvnd iæxwOE qaj du ioe kŽædu xvyhf ndaj 1
 Xqghuylvqaj hq vnd l qgh kŽæ eŽgh suhvnd r f k vnr u hvnd h hp shos Ž vdp edqghwp hœq
 gh rœnd dvshvhuq dy kŽædu xvyhf ndaj r f k ydg hq kŽædu dywlvœl suhvœnhq ehv/ghu l

Ydvh OE OE qh vnd wœgd xvyhf ndaj hq dy p Žaj vlgj nr p shvqv sŽ hwiœ OE OE qhw
 qdævuj wOE v Dwsøghud r f k j hqr p iœd gh p Žaj yhvqvnds d j d OE p Źghqd l vdp duehv
 p hg hnyhuq dwOE v l v qghukhwœdw xvyhf nœv r f k iœgnœs d p Žaj vlgj nr p shvqv %

J uxqghuqdi oe OE sœghq ioe ghq j uxqg OE dægh xvelœqlaj hq 5347

Qhgdaq ilqqv hq dwd oghugh ylnvj dwn nxuuhqd l j | p qdmhw elr o j l 1002 p hur p nxuuhqd
gluhwi uŹq J uxqghuqdi oej | p qdmhw oEr soq 5348 -81 Elr o j l,

Redj dnr ulvnd nxuuhu

41 Qiyhwr f k hyr oxlr qhq +EL4,

L nxuuhq v oEr nu gh wxghudqgh lq vj l dyhw i oer w oEr q lqj du r f k gh nduchv ulvnd gudj hq
krv dnd r uj dqlvp hul Xqghu nxuuhq ehndqvdu vj gh wxghudqgh rfnvŹ p hg v oEr w d w
lqk oEr v d r f k ehndyd nxqvnds lqrp elr o j l q r f k p hg elr o j l q v r p hq gh o dy ghw
qd xuyh v qvnds o j d v oEr ndqghv l Ghw fhqv dnd shushv nlyhw l nxuuhq oEr i oer w Ź h o h dy
hyr oxlr qhq r f k ghw ehv / gh o h l

51 Hnr o j l r f k p l oer +EL5,

L nxuuhq wxghudv hnr o j l qv j uxqghur f k dyhw p Źaj i d q v d p wkr v nq p r wghqqd p Źaj i d q
l l l q d q r f k d q d q v d v l y oEr h q 1 F h q v d v l v r p d q oEr gh i d w u h v r p k r v d p Źaj i d q h q l
qd xuhq v d p w p oEr j khv u q d d w e h y d d p Źaj i d q h q 1 J h q r p nxuuhq edu gh wxghudqgh
i oer v j q d oEr h q p hg d q g d hnr o j l vnd p l oer s u e d p 1 L nxuuhq l q j Źu h q d v nq xqghu oEr q l q j
h o h u h w d v w x y h f n d q j v s u r r n w v r p j oEr u hnr o j l q h o h u p l oer v v l oer v Ź q r f k v r p j oer
v oEr w oEr g l j w h o h u l v d p d e h v n p hg d q g d l

QdMr qh o d i oEr g n s d g h nxuuhu

61 F h o h q r f k oEr v o j khv nq +EL6,

Nxuuhq j hughq wxghudqgh hq g n s d h i oer w Ź h o h dy f h o h q v x s s e l j j q d q r f k i x q n l r q 1
Nxuuhq ehkdqg d v r f n v Ź w l u q l q j h q dy f h o h q v i x q n l r q / f h o h q d v i oer oEr q l q j r f k
oEr v o j khv nq j uxqghu l F h q v d v l v r p d q oEr h { shulp h q v h o d d e h w oEr v f k xqghu oEr q l q j du
v r p gh wxghudqgh x v i oEr l

71 P oEr q l v n d q v elr o j l +EL7,

Xqghu nxuuhq edu gh wxghudqgh i oer v j q d p hg p oEr q l v n d q v d q d v p l r f k i l v r o j l 1
F h q v d v l i Ź r u oEr p oEr q l v n d q v d y v i x q n l r q h u r f k i r u s oEr q v l q j v d p w d u y p d v d q v r f k
p l oer v ehv / gh o h i oEr p oEr q l v n d q v k oEr d 1 Xqghu nxuuhq ehkdqg d v p oEr q l v n r n u r s s h q v
i oEr Ź d d w d q s d v d v l v l oEr i oEr g u l q j d u r f k i oEr v y d d v l j p r w l w h k r v l

81 Elr o j l q v v l oEr s q l q j du +EL8,

V l i v n p hg nxuuhq oEr d w gh wxghudqgh vnd i Ź i oer w Ź h o h dy ghq elr o j l vnd i r u n q l q j h q v
ehv / gh o h i oEr oEr q l q j h q dy i d p v l g h q v s u r e d p 1 L nxuuhq edu gh wxghudqgh i oer v j q d p hg
r o n d v l oEr s q l q j du dy elr o j l q l q r p p h g l f l q h q / l q g x w l q r f k d y v p h g h o s u r g x n l r q h q
v d p w l q r p k Ź oEr d u d y oEr g q l q j dy q d x u l o j Źaj d u q d 1 F h q v d v l i Ź r u oEr r o n d v l oEr s q l q j du
dy j h q v n q r o j l r f k p l n r elr o j l 1 L nxuuhq s oEr h u d r f k j h q r p i oEr gh q wxghudqgh h w
h { shulp h q v h o h u h q xqghu oEr q l q j p hg d q n q l v l q j v l oEr elr o j l q v v l oEr s q l q j du l

WX WX OVX vnlp x nvh o q h q rd w lp l q d o q h q x o r q d r s s lp l q h q

VXWVX WDOYL

Vxr p ddbqhq nr xoxyr vl sdqr wvx vdyhq1 Slp hCE n| p CE exp lwd vl σ vndwd vCE q nr xoxyr ghwd xhdp sl nxxndkv1 Wdy l vxqwx nxlhqnq r dydq yCE k| og| qqhw/ yxrgqdnd xnr 0 shxnvhd1 Wdy l vxgghq vdy lwhqd r dnlq wvxwxd r shwdw k| og| qvCE x qvd r sslp lv p sCE wCE p| os vdyh1 Vdun lxnvhqd r d vxwxd vdyvlq xnr vkvq lq hu vdygr qdr r qCE exp dwd1 VXWVX Wdy l 0 vxghwd vxwvwlq vdyhq xxvlq rd ydqrlq r shxvghr lq/ kəwv/qCEsr kglqqr lwd rd xxghq lghr lqql1 Wk vCE| dvlwq r ssldqhudnd/ k| og| qqhwq mxwvdyw rd vdun lxnvhq xndvhw hldvdyCEh vCEp r ellddwvrd p| os vCEdnyld vxwlp xnv1

Hqvp p CEhq vdy l sCE d l vwlq ddp xad | kvlvhCE vxwvp lvh1 Ydvp l vwlq ydvwvhw rd yCEhvw vCE nrd sdxnxi vdp l lnxlqhq schndq1 Xnr qd r d qlp l wCE sCEw/ r d vCE nxlq vCE vlv l p p h Yllnq ndp sxvdxhwd nCEh Yllnq x qqr qvx r dxhwd P dndq yduhd vl vkgCEd qv x qj dxwkvCE vCE kdxvp p h vddg vdy l nxd r d qj kp CE d qv x qj dxvp hwd1

Rvdxwvndvwlq qhCE wce kp CE1 SCE dndq r vdxwvndvwlq qhCE hwd vlkvCE chwd1 Wk vCE chwd r dydw D1 Ndyw E1 Oxp l2 CE F1 HCE hw rd G1 Kdyd qqr lqvl Mndvhd vlkvCE chwd r d | nvlqhwd vlkvCE mnd wlp lydw nhxwvdxq rd lghr lqqlq dydhd1

Or xqdwxr ad sCEp p h CE p lwnp CE oxr qwsCEr w Vr wdaqshCE CE slp CE nr wda1
HyCE p dwlydw rd valqdd ulw1 Vd p p h nxxad sCEr glq wlp lqqdwd 0 p lwhq
xnr qdr ssip lghq rd Ò shxv r qqlwxydydkdndydw xnvhd1 Vdxr q rCEh q r d dnddylhCE
wlp lqqdwd hnd vkvCEm1 Gudd d rd shdshgd r j llnndd k| og| qvCECEnr nr qdvxxghwd
slhqu kp CEwlyCEwvlp xvuhvqh xxghd sobghvab/ mwd kh wvnydwrd udr wlydwp lCE
hulvlp slid dMr lvd wlvhqvnd ndqwd nigr lwhq1 VvkCEwCE sdqr wlydw hulvwhq
vthgr qdr rhq/ valvghq vhnCEylhwqqCE vlvCEsd Rvd wvnlp xvuhvhdvghq udr wlvhd
rdhwlq rd wvnlp xnvhwylp hlvhwlq ylvCEvCEr lwd1

Wlghq nr xoxvwsCECE kh p lnxwd vxm r shwvthq ydp lwd lgh r shxwxr nrlghq
p hunhwCE Rshwvrdw r dydw lghr lghw nr nhp xnvhqvnd srkrdd rd rvlq hqvp p CEhwCE
sCECElqvslur lwxhlqd r shxwxr nlr w mlv vlvwvlq r vlvq val nr nr qddq1 Vd p p h
nr nhld lqqr wdyld vkvCEm | kghwCEr kvhghq nhklwCEjlvCEghvghq1

Nr xoxwvthq qCEexp dwd ndwr wvqd vdyr vxxv r d vCEghvghq ndxqlv/ klyCEp lhwCEnd
xnr Ò shxvur knxwd khCECE\ kvhghq kdx kdmlvnd xnr qd r shwv lwd vdyhnd r d
p dkwlydd rd nhvxwvdyd rd lqqr wxyd lp dslu npx sxl r vdwvrvhd nr nr nr xoxvnhq
dndqd1 Xnr qd ndqddwd r shwvdlvp | os vdyhnd

WX VVX OVX vnlp xnvhvdghq rd wlp lqqdvdghq xnr qdr ssip lghq

VXVWX YLQWHUQ

Hq wru ghody ghwi lqvnd vnr žhwlqj dnu xqghu ylvnuq1 GhwOE p oenw ndow vqoj whohu vnlj w i dnd p žqdgdu dy vnr žhwl Ylvnuq vr p žwlg yhundu OEgŽ xva| wov dvn l xlvxqghuylvqlaj hq1P žhwp hg ylvnuq1p dwyduvžghv dwehndqv dOEduq p hg kxu qdxxuq ndq dvyOEgdv vr p xqghuylvqlaj vp lœer fnvž sŽ ylvnuq1 V i vnydu dwehndqv vj p hg r dnd ylvuj d xwp kxvssj li vnu i Źq hwoOE qhvshunugdggh shushnly1 Xqghu VXVWX0 sur rlvnuw Ylvnuqghoehndqvgh vj ghovj duq p hg ylvnuq j hqr p vžyOEj dp œl vr p q| d xqghuylvqlaj vlg•hu ehundgh p hg thi dnvir q rfk eudqwr up lqj 1 L xssj li vnuqd oghumhgv i dnd r dnd OE OE qhq rfk r dnd vœj v uhgvnds rfk p relœhvir qhu dvyOEghv l ghp 1 Hq gho dy xssj li vnuqd kdgh xqghuœqlaj vghœu vr p i r uvdvnlqrp kxv1

Ghq iœwœl ylvnuqj hq eœndgh sŽ p r j r qhq p hg dwghovj duq ehndqvgh vj p hg yudqgd1 Vhgq j lfn yl l j hqr p dwœœkdgh OE sôj dndOEhurfk xvxwqlaj p hg vj iœxvln Źghg ndœvndpxdvyOEhul Yl kdgh qOE dj hq ehvOE wr w iœ dwydud xlv r dyvhwvOEhul Yl sur p hghudgh i Źq YInv fdp sxvr p Źgh vœ YInv qdxxun| ggvr p Źgh1 Xqghu sur p hqdggh ilfn p dq j œd hq i Ź hœr qj qlaj vxssj li whi vnuvr p yl ylvœ v dthgd sŽyhp vr p yduj uxsshqv i Ź hœr shu1

Ghovj duq ghœghv lq l i| ud j uxsshul Xqghu gô hqv œ ss ilfn ghovj duq xviœd i| ud r dnd xssj liwschhwl Xssj liwschhwlq ydu D1 YOEhul/ E1 Vqœ rfk l/ F1 Gxu vdp w G1 Revhuydvir qhul L yduh xssj liwschhwi dqqv hqœœ xssj li vnuvr p i xqj hudgh vr p j uxqg iœ glvnxwlr q rfk eudqwr up lqj 1

Xqghuœqfksdvhq ilfn yl yOE p drwl qdxxugdj khp p hwvrvndqshvOE ydup d nžv1 Oqfkhq vp dndgh j r wrfk yl xqghukoœvr w p hg ehvœhul Yl ilfn rfnvž koœrp gô khp p hw yhunvdp khw0 kxu xvlqOEqlaj rfk xlvxqghuylvqlaj ôfndv lqr p vp žœduqvshgdj r j lnhq1 Hi vnuksdvhq i dqqv ghvOEqx vlg iœ dchvlyhudgh xssj li vnu1 Lkhœkhvq vr p xva| wdggh gud p rfk vshœshgdj r j lfn ilfn vp ž uxsshudj j œd hq xssvOEhwi OEg vœohq q| sœqhwgOEgh vnxœh xqghuœœd rfk uœssr uvd r p i dnd r dnd vœhu vdp vlgj wvr p j uxsshud vœœgh p r w

yduqguđl Xssjliwudv lqqhkžw irnxvudgh sž rđnd yhvqndsvr p Źghq/ nrqwr fk
nr p p xqlndlr q1Hq ghody xvir unduqdv uđsr uwhughv r fk ir unqlaj hq ir uwdw rfnvž
lqr p kxv1

Xqghughq dągd xvelqqlaj vgdj hq l iheuxdu ilfn dEduqđ vhwv lqd hj qd dhwylwvhu1Edvudw
sž vqd hj qd huiuhqkhv r fk ghv lv lqvsludgh dy ghq i dwd xvelqqlaj vgdj hq kdgh
dEduqđ sđghudwj qd dhwylwvhu vr p vhwghv dqlaj hq ghv lv hdu khv r fk kžwv1Yl ilfn
sur ydsž lqvsludgh xssj liwv r fk vwdp p dqvylgduhxyhf nđghp 1

Xu xvelqduqdv vj qylqnhoydu ylvwvhp dwydf nhwv ghv wv dEnv hqv lqwhv h dwxqghuylv
xv r p kxv r fk vsuhg j r wv kxp dđ Ghq j hp hqvdp p d ylv d dwvwdp p dqv d sž dw
xqghuylv xv r p kxv sž ylvwv ydu idv d wv r fk ghv d dđ elgur j p hg hq glvnxvudgh
r fk hqv v d wv d dđd xqghu khv xvelqqlaj hq1Ghw d vj d vž dwxqghuylv xv r p kxv
Gh sž ylvwv\$

WXVWX OVXvmlp xnvhdqhq rd w lp lqqdđqhq xđr ss lp lqhq

VX VWX OVX vmp xnvhdqhq rd w lp lqddqhq xmr qdr ssp lqhq

WCE r q vxxqqlvnp d xonrq d rsslplvhq nrnrqdvxxghw d Ullkndbr q nrxxwd
Vxxvxdwd1 Nrxx r q nrqlvndd qh q |kvngCEnrxx/ mwd r q yxr vlox ndw 30<1
Rsslnr nrqdvxxv vxxqqlvndd q vrvxvmdydhv r vqd :Q oxrnnlhq elr o jldq hnr o jldq
r shxw d/ vlvng h wCEh d d d d :1 oxr ndq v p lxxwd rd r d vxx yxr vlnh o qd ylhCE 1 oxr ndq
v | vxxnxndxghq1

Xon qd r ssip lvhq vhwvCEw vxuudydw wqqlCE nCECEvhr uhhwvhp sdd r shxwvd rd ndqgxwvdydw r ssldwvd vxwvlp ddy rd lkp hwnhp CE yxrgdqdnr rinq p xnddy ydkwxydd CE lxr qvr d1 Nr xox yCEwv CECECEhv | ghvCErdwvh p ddrwvdy ydkwvdyd CE lp hwCE p hwCECEvxnhp | CE r ssldwvd vxwv nxqvr sr ox/ mnd slwvxv r q qr lq nlo p hw1-V4/ V6/ W/ W/ W/ W/ V43/ V45/ V4/ V5/ V6,

Xonrqd nxqqdq r p lwdp dwd dE p hwCEr dyd wvnlp xvp hwCEr q nr ydwd nCEvCE
Rssldlghq ndqwd r q nCE/ mndp lhkhq r lnhxghw kxr dnd/ mnd r vdp p h ydnd
CElax qvrd lVkwCEr q nr kvld/ mldw s | ghCE/ nhCE CE slhqCEqCEwlvCEsxqr nld/
ydsxrd rd vdp p dnd/ mnd hlyCEnxlvqnddq nxxα mndp lhkhq r lnhxghq slulq1Rssldlgh
r q nhur wv/ hwCEr vdp p h ydq slhqCEqCEwlvCEr vqd r shxwld rd r shwdrq αydr1VCE CE
p dkr dwd ndyhlklq nr vnlp lvhq rd qlghq nCEvCE p | αx r nndldw r vqd r sslp lwd
P | αqCEwlvghq ydr nxydd lghq r q p dkr dwd

Mlxnxxq yllp hlvCEExqqhcd wvwxlp p hCEExr qwr q rd r p d w/sdl ydwlq vdwndw/
mwd w/cenhvq vxnm k/yqlq1Rssldw ydwdwdr p dq sxxqvd rd vnllyCE/sdlq ndqwd
shkp hCECEExp hwd p hwCE dxnlq -Nxyd411

Nxyd 41: Oxr ndq r sslalghq vlnhp lOp hwCE dxnnhnd nr xoxq CEp hwCECE<1451534;

RSV 5347 r krlhwnhwd r q k|og|qCEp r qlsrx dvhw/ r sslp lwla rd p |oxr oxr qqr wd1 Oxr qqr wd dlnnxp lqhq rd vlkhq vxwxp lqhq rydwCEnhvCEr sslalghq oxr qvr vxkvlnhq nhklvlnhCE Yxr ghq nhwCE xonr qd r sslp lvhq rdhr q dndqd r q valnr lxxv v|yqhCE oxr qvr vxkgwld rd p dgdnd| qq| wCElnxdp hwCECEp |oxr ydsdndnd1

Xonr qd r q rvd vkwCEwCEwhqCECEwCEwCEnd rvd r q valnr lxxv vkwCEp dq v|osdlq ndqwd1 Rp dq sxxq valundox r q slvCEhwr lqhq vkwCEmwd r shwCEdq valundndp ddq/ nlundp ddq kodydqr rd rd p |oxr uokkr lxxp ddq CEoxr qqr wd1 Xonr vxqqlnd vlnhCEwCE vkwCEr ydwhulald rd nhwCEddq ydkvndyl/ valnr lxxv r q/ hwCElnhp lqhq hl ox1Vxqqlq vkwCEr r vddq dxwCEh sdhwdq rd r shwCEnd nxydd dxwCE rd slwln wCEwCEwCE

Xonr qd r sslp lvhq vxqqlwr q vxqqlvnox vxudbydq dndvCEox q p xnddq=

Xonr qd r sslp lvhq r sslvqvnd nhw/| nhwCExnndxghnd 534< |kvlnhqCE43 ndssdndnd1 Ndnr wd s|lvCE xonr qd vskwydd r shwCE ylhCEvCECE1K xkvlnr xnr nxxwd s|lvCE dvCEm nCEwCECE yllnr q wlvw vxqld xonr qd r sslp lvhq/ mwd ndylr q vlnhp lqhq vdbgdq nCEvllq1 Nr xoxq elr o jldq r shwnhwd nCEmllq nlund Nrr gl HCE CE-Avdrr p d Sur,1 Xonr vxqqlnd v|yqhghwllq yllnr q hqmp p CEhCEvxqqlnd oxr ndwd nCEwCEwCEdd1

W/vxwxqhlhwxqqlw

Vxqqlwr q qxp hur lxx qxp hur lq 40431Nxonlq r sslvxqqlnd r q vkw/ r p d r klnp d rd vlkhq r krlhwr Rkrlhwr q nr slrlxx rd op lqr lxx/ mwd qh nhwCEwCE xonr qd v|osnhqwd q xvhdq v|kp CE ndqwd1 RshwCE ydnd ndnlnd vxqqlnd yghq0 rd vCEnhwCEwCEwCEwCE op lqr lxxw nlumlxxvCEsxwrd v|kp lnd dxwCE/mlnd nr r vddq vkwCEhq vxr wvnhw1-Nxyd51

vxwx ovxvmlp xnvhdqhq rd wlp lqddqhq xonr qdr sslp lqhq

Mxαnxx=	Vdp p lnx=	K hq p lnx=
31Vxwvxp lqhq p hwCE rd r p dq sxxq ydqvd/ αp lyhlwv nvhw	41Hα d qhq rd hα w q αr qv/ kvh wCE lqhq nCE/ αr nndwqqlα CE 51Vdylqhq αr qv1 Udylqvyhnr wrd udylqvnhvαw	61Odthq yCE/hwxkvnhw 71Yxr ghqdrwd hCEvq vhyl wlp lqhq vdyhwd

P dddvnx=	K xkvlnxx=	W xnr nxx=
81P hwCE nhur nvhwrd ndyxsdhndvnlrCE 91P hwCE slw kp CEkvCE dqhlwq nhux : 1P hwCE ndylw/sr krnhur v/ rCECEnd vdp p dhw	; 1 P hwCE ndylw/ ylghr vkvCE 431P dhwrdmr h	<1QCE nhuCE ndylr w/ nhyCE q ndyxq dndd 431P dhwrdmr h

Daxwvuj kp CEkvCEαn rd luαdvhwαp lqr lgxwnlumlvαsxf Sdlwr dydws| v| yCEnd qh r q
qxp hur lw/ sdjwhwlyCEnd qdr p dq daxwαvd vxqqlq vkvCECE nr r qvllq1

4PhwCEsslwqWlHα d qhq rd hα w q αr qv

Dα lvp p h elr σ j lq r shxnvhq vdp p lnxwd uxqvdxp lvhwrd rd n| p CE vdylvhwrd vCEvCE
Elr σ j lq shuxvCEvnhwr ydwxvhq kdqndd rd luαdvld rd qlghq p hunlvwCEnd nCEwCE
s| ulvCE xnr vxqqlα v| yhqvCE CE1Xnr vxqqlα r αdq CE p hwCEvCEvhlq nxl αr ndαh
ydlxwd vxwlp xvp hwCEvCE

Result of χ^2 test =

Wconhqvhn r sslwqqcl | kghwCEyosduvl nqwd1 Vhn vkvGEUhlssdwl rd ydud dnd
p|oer ydwkwnq dlvhoxq ydwkvdwdr1 Rshwdr rwd ydrnxdq ydp llwd
ydwkvdwdr1 VnkGEwGEr l vddp | kvhqvGE3 slwvGE

D, Hordqhq rd hawq or qwr1 Hwl p hwoEhulalvd dlr lwd/ mnd nxydw/dw hawdwl
or qwr d1 Rwd qllwE p xndm slhq qE m1 Hwl p | or hlp hunhrE hawp dwd or qqr wd1
\\ kghwE dmdwd yr lwr wd p | or ydr nxydq nE q| nE OE Odwl ydw xnm dxdwd
nr kvdd D/ hawdhwydmp p ddr rd hawp dwr lnddr1 Mlv r lwnxydq/ qllq dydd nxyd
nE q| nE OE d dwd dxdwd1

E, Rp d sxx 0nQFvuyhkvlp QFCEsxxvdm1P lQFvch nxxoxBNlhuuhd sxxvd rd hwl p dwdw
slhql p xlvw sxxvdm rd rd vhp xndbM1Qdwhnd p xlvw wdxwvch nr kvdc E1

F, Oxp hq v|y||ghq p lwdp lqh1 P lwdnd x p hq v|y||v sxlgqh OE wOE HwnOE
nr vnhp dvr q nlyl val ndqv rd p lwdnd v hq sOE OE q OE y OE v OE p lwdp dwd nxr sdwd
val p xxv hq hs OE d v hwd nr kgdwd,1 W lwdnd p lwdv nokghwd nr kvd rd dvnhd
p lwdv n ch nhvndy r1 HwnOE Mp 1 nlyl OE n OE r OE d p dwd d v y OE nvdqs OE OE kv OE
p r qv/ nxq x p hq v|y||v r d v hq n l q OE O d w h d x p hq v|y||w E nxyd d y d w d m d v
nr kv d q F1

G,P h w Q y O p d d p d l H w l n O E r s h w a d q d q w p d q y O E q E w l n h q t u k v a n h o k s d q
y O p d d o b s x w y O E r E x r q q r w d n d r w a n d s l h q h w q E w l n h D v h n o d d y O E q E w l n h w
d x w a h n r k v a d G n d a l l a h q y l h u h q o e w E O h q x r q q r q y O E w

H, Mndp lkhqr lnhxghwP hwcEsd vnkGQp r qldmR lvd mndp lkhqr r lnhxvnhq dqvdp dnd
 xydd1 QCE hncEsdq ndqwd yxr ur vnhq sdqvr p llp lqd qllwE mR lvd/ mnlvd p hwcE
 vdd vnkGQED lqd nxq sdu duydd r lnhdq dmdy/ qllq vddvnh vlvhQES lwhhQ1 Qdvnhdnd vddp dqqh
 slwhhw | kvnhq1 VknCE r nvdqs QnlwE xqp hur dxbwddh nr kvddq H/ mndd nxydd
 vddp lddqh slwhlvE

Nxyd 61Ndkghq sdLq r ssiwqqqlq 4
wcrwlnq hmwQF lqhq xwnlp xvdwxdwdf
Rshwdrd slwln| w|w|wkwQFCD
wq|w|wkwQFCEB043 slw|w|wQF

Rvd lw hwm nxyd ydp llwd ydwdvdxwvwd1 Nlumlvd nr w qd qEw/qEylknr r q dlr lwd/ mlvd
wlwlp hwCEhucd1 Yr lwp | os nhw d/ p lhwq w osnhqwd vxnd rd p lhwq hkg lwn vhwgCEndnl
vhwCEnd Nlumlvd p | os d k| wnx ydv sxxwv rd p lwdCEh qEwvdp p lnxlvhwd p hwCECE

www.vwvmlp.xnvhæghq.nd.vlp.lqđđghq.xnr.qdr.sslp.lqhq

51PhwCEsslwqWlUdylwqnhwzrd hddghq ur r dwhnr vj wnhp lwCE

Vkqqlq dxdw r d wlp lqqdqdqhq klssdhl nni Gsomsrd p || uCE1 Okr ndwd ydwlq 607
ylluxsomsCErd s sxwr dydwp || uCE Soms ydwlw ydws hCExxq udxwd dxdhwd1 Rshwdrd
dk| hwl nhwrl somsrd p || uhq shw Odbw xkw hwd rd vhwq p hwCE/v dnr l1P hwCE/v
nhw/ nxqqhv ndnnl p || uCE r dydw sCE/qhw somsrd vddnm rd nxomwv shwCE1
PhwCE/vnhq s sxnm hl somsrdvldghq p || uCE vnhwllq rd vxulp p dq vddlq vddqxw
ndwvllq kxlssxshgr nm1\ kghwCEsr kglwllq hl somsrdvldghq p dkg r dhwq shlqqCE
r qqlw xp lwd rd sr lndwq vddw p lwd dqw n| n| lnm1 VCEvkwCEvCEr sslodw vnllyCE
k| p loe dxdw n nr kvddq G -Nxyd8,1

Udylwqnhwzq vnhp lwCEyduh q r shwdrd r d dvlmr wd d p lqr lwd d hmxyl d rd huldvd
qxr dd1Odmxyl d r d ndyhl wd/ huldvlwd nxowd hwd rd kdmw d hwd1

WCE CE vxqqlq dkhqd r ydwhdghq wlp lqqdqdqhq rdhr vxr wdhq/ nxowdhq rd kdmwdh1
QvCEv sr kglp p h udylwqnhwzrd rd udylwqyhnur rd1 V/oenhqvhd sdvl ndqwd rd nxqxvhd
r shwdq dwp ldr krlv1

D, Ydwh r shwdq sxunlwd nxyld hddwCE mlgq dyxod yr lw udhqvdd
udylwqnhwzq1 Yr lwr CEghvCEnhwad x r qqr wd dwp yldCEqCEvnlCE Udhqgd
udylwqnhwz nr kvddq D1

E, Hwl hmlp hunnl vxr wdwd rd dvl v dxdw n nr kvddq E1 S| u dwpCE CE
vxr wd rd mdr q yldCE kvh| wCE lvhq vdyldw dwp lqd vxghwdh1

F, dpgCEneqCEvnhq nxowdwd rd kdmwdwdB Yr lwr wd p | os nxyd rd dlwCE
vhq sxkhdp hnd nr kvddq F1

G, Chl nni | kghwCEnr nr x r ndq ndqwd/ r shwd r krd1 Chlnlq rCEnhq vnh nr kvddq
G k| p loe mnd nxyddwxqhp ld dhlwCE

H, Oxp l hulwCEvdyh1 P lwd CE soslod lp dwd/ x p hq slqqdwd/ 48 fp
v| y| | ghwCEd lkdq p dq udxwd x p hq dwd1 Nlurd vx r nvhwvwd nr kvddq G1

Sdlh q
vxqwlwvCEh q nr r qw
dxdw d1 Udylwqnhwzq
p xr gr wdp lqhq r d
p r qhnd kdqndd rd
vlkhq sdwllq yldCE
oxr ndwxqql1

61PhwCEsslwqWlQdthq yCEvhwxkvnhw

Qdthq yCEwCEvxkvnlvd r d r slvnhw vxqqlcd1 NCEAp h . p hunnlCEnycdp ddq vxkghw/ mwd dthk| csl/ rd p llqxp hunnlCEnycdp ddq vxkghw/ mwd r q dthh kdwd1 P hCEh nCEy/ CE qhxwddnd vxkvnlvd/ mvdq qlvCEh r d hmp hunhlwCEVxqqlq ydp lwndp lqhq yhl sdng dndd/ vCEdthmxdknvhwslw hwlCEnd p xr ndwd1 Qllghq CEvnlqCEnCEvq Z lnshglq vlyxwrd dthwld rd Oxr qvr sr ulq dthmxdknvd1 Qdthq yCEwCEvxkvnlvd vkwvlq p | cslghw nxydknvhl Qdthdwl r dydw nhw rd p hwCE | uCE kluyt rd kluylnCECEh/ ndghuyd rd p hklCEh/ p CEy/ rd khunnxwv/ vki rd slkad vhnCEqr nnr qhq rd qr nnr vshkr qhq1 Qdthwld r d dCEw nxyld d p lqrlwqd rd kluyh d p lqrlgxwvduyhwuhnylVlvdh1 QvCEw r shwrd ydwm vxwvndqdd/ mnd usxwvvlq nkgghq sxxq yCEq1 Vxqqlq dylr lqvlvklq lwduylr lqvlq rd vCEyduh r d p xndq d p lqrlgxwnlumlvxvdxwrd vxwvld

Vxqqlq vjcnhqnd vskwx nkgghq sdq | kvhlw/CEr shwrd ndd sdv

Vxqqlq vkwCE qlp l r q CEsur i hwr uq gldvrd vskwxp d r q Wlvnhq p hwCECECE

Doxwv=Rshwrd dxwv vkwCE wlyr wdp dnd nlnl vnyhwxvnhv vlvnhq p hwCECECE KCE nhwrr/ hwCEsdnd r q 709 sur i hwr u d vxwlp xvj kp lqhq1 Vxwlp xvj kp CE r ydw nhnlw/qhwhdthq yCEvllq vxkvnlvlq rd hlvndyCEvxwlp xwxv nvdq1 Wlvnhq sCECECE r cwxwvnlvCE qj hp ld rd sur i hwr ulghq m dhp p lq rCECECE gldw ydwp hqghwvndvlq1 Ql wr q CEvhwv/ 48053 p lqxxwld dndd vddgd nxydwCEvhwvnhq rd vnlvld hlvvnhq vxnyxvIRshwrd nddr sslcdh p dnddwd u kp CEcdydwxxqqlvnd hlvvCE

Rkrh= Uj kp l dnd dthq yCEh q vxkgh -shwvddv/ ndylndvylq/ cCE nlsdax vd lvCECE lwxkgh,1

Uj kp CEvdvdyvndh dthmr uwd/ mld r q vhw d dthwld1 Oxndd rd vxwvndd vhwllq1 Uj kp CEh yr lgdd ndd p | csl pxxv vshwrd hlvvCEyduh1 Vj csl vxqqlwvxq ydvdq dndd43048 p lq1

Uj kp CExxqqlvndh gldhvvnhq/ mqnd hlvCEUj kp CE ydwhp d sur i hwr u1 Sur i hwr u d nhnlvCE qlp l/ mwd vxh hldh u kp CE hmp hunnlhd1 K| yCExnp CECEglr l d r q 6071 GlwqCEvndCE s| vCEgl vxylq rd sur i hwr u ydvd glr rd vxwv dnd nCECE kvnhq1 Glwv CEhndvndq CEshwrd ydwd ddq nr kvdd1 Uj kp CEvhwv xr gr wdydwvnydwqr shdw rd rydwsdndddq sur i hwr uq vhwCEvCEvndhCEnd nhnlvCEMr lvd dthq yCEwCEvxkvnlvd1 \ nvl glrlwd yrl r d ylghr/ mld qCE | p | csl nhwCEYr lwh glrlvd hlvndCEhwd nCECE CE dthqyCEh q vxkvnhq nhnlvhwld1

Vj csl hlvCE vxqql rd pxxv rydw lqqr vxqwd nxdndxqvd vCEvnhqCEylyh qhqr d1 Nxnq sur i hwr u p | csl wvndh lvhqvCExxdndh u kp CE nhvlp CECElp hCE

VXWVX OVXvmlp xnvhdqhq rd wlp lqddqhq xnr qdr sslp lqhq

Nxyd 81Glr rinq vkwndqj dv nr xoxq p hwCEd nxyd vkwCEVWVK WDOYLGCECE

Rsslwqqdq duyrlqwr vskwx lwhduyrlqdr wqqdq osxwd1 Duyrlqwr vkgCE
ep lqr lqxldh osxldh vwhld1

- Nlumlwvssxxq sdq qxp hur rdr p dqlp l/ duyrl wqvld vxuddydwl=
- 41Rp dr vdwpx lqhq r krlvlq rldqhlwr q vwxwpx lvhd -30s,
 - 51Rp d dhllylvxxv vwxwvnhq vxxqqlwvhd -30s,
 - 61Hwlvnhq vxnp lqhq rdr p dr vxxv vlqCE30s,
 - 71Rp dr vdwpx lqhq rldhnlwlp lqhq p xlgdq hlv/wlhq vxuddp lvnhq -30s,
 - 81Duyrl r p dq ydvwvnm vr slyxxv xnr qd vskwydhr rsslwqqldh -30s,

Lwhduyrlqqldw rdlq ydulq uhdwld rdr p r qhd ydvwvnhw vssxl slwlvCEvCEr d
yduq vxxdwdr nr ddd1

71PhwCEsslwqwlYxr ghqdrdr hCEvnhq vhyll wlp lqhq vdyhwd

WCECE wqqdq dxdw vluwlp p h qrsdwlv nxqnlq oxrdq vwnlp xvp hwCE rddr lvp p h
vkwCE1Dikhwr d nCEvny oxrdw ydq yCE rdsdmp p h vlkhq vxuddyd nhud/
mlwd wqqdq dkhq SrzhvSlqglwr d nylvwx rsslqghq dydwpld hCEvnyld1
Sxr dwdrlw xp lkwCECEd w lqhq sxr d p hwCE hCE hCErshwdr d yhmvwCE
yduq vkrCEp dlvvnnhCEmlwd | CEvd r d dndw sr lv vhnCEglj lvdqhq ydhd1 Ydhd
dhwmlq slhqhq skyladlnr q sCEm1 HCEvnhq vdyhklp lkwCECE r d vdw nr xox
rshwdr dr nr wd shkp r hCEvxnrr/ ndux/ nhw/ nCEp h/ vld/ kllul/ kl on/ sr ur/
lghv/ mlwd rvd r d dhllylvdyhklmlwd/ rvd ylhwl vdyhq nlp CE ur nvhd/ rvd
vdykr ur nvhd rdr vdyxqhwd1

41P lCExp l sdqddBNxlqnd sdq yhwCEd vdwvxd xp hwdBSr kgl sdq ndqwd/ p lvh
vhywCEwpx hq sdqr q rd vhy yhlp CECE1Rshwdr r q dwdq p lwr rd -p dlvvnnhCEd
ydhd1 Vh hqqdhr O dmv -k/ sr vhm, xp hq sdqr wd rd yhlp CECEvhylvCECEp lwd
rd yddq dyxld1 Nlumlwvssxxv nhwvssxdr d dld nr kvdq D1-7s,

51Ydwh r shwrdq ndmwd h0E1P lhw p lhw V0E0E0E ylhW0E0E ydh1Odydwd rd uwhqgd
sdnnd 0E0Eh r p dd sxxv0E/ mwd h0E ylhW0E0E ydh1Nxyd h0E hm vnhp 0E0E0E
w|sl0E0E ydh1Mdr lvd1 -uxr nd0E/ vdyshV0E|0E|p lvsdnd/ vxr ndxw p lqh q n|0E0E
Nlumlvd0E sxxq q kp 0E qxp hur nd0E vdh0E nd s|g0E shwrd nxyd0E d0E p |0E h0E hm1
-0E0E0E0E| nxyd dxw0E nr kv0E E,1+7s,

61 Nluml d osxoh huf qz othrnd vhg vsd vng | E dghwd -yr lwp | os hwl Eqr shdw vlhw d
nEq | nEq | Cllw Eobssx nr kvdc F1-5s,

Nxyd 91Nhwx rd lghv chmlylwyhkvmlqd r dydwlnhp G5Czch wj slawp hwc5wEd yddqpl lwd1
Doxwddh nr r wllq xplvkvGCE ydwknvhd nxyd chvrd vhg wdwylhwCEdy11

8PhwCEsslwqW1PhwCE nhur nvhw/ndvxsdlndvnlrCEnd sxxcrlhw

Vkqqlod r dp p h nCeqhwp hwCE nhur nv/wrd ndyxsdndvnlrCECE1 NdyxsdndvnlrCE
r dydw nCEw hngCE/hudv/ mvg qllvCEd qllghq p hnlv/wCEdumlvhollq p CEv/ OnkvCECECE

D, P h w o e n d y d d s x l v d l D l q d y l k d q q d w k d y x s x x w r y d w v d y h o d h q y l k u h v o e H w l q h x o v q e w h w n r p h w d h u s x x o h w d l H w l p d k g r o h w l o e p y o e p | o e n o j v z p d u d l O d v l q o e o e w o e o j q e w h w d x w d h n r k v d q D 1-6 s,

E, Sxxw yrlydw ndvydd p rghqdlvlwd | p sCEwvCE rd yddMydw hualvlwd
ndvxsdlndvnlndvCE P Ceq|wndydydw hualvlwd/ nxq ydr d r q sdong2yCEq wd
nxq yhwCE q sdong2yCEq1P | os wylqlvghq p CEDEydnxwdd p Ceq|q ndvxxxq1Nxq
ydr d r q yCEq/ qlq p Ceq|q ddr ndvwnlxxydwqr shdp p lq nxlq ydr wd1 QCEwdd
sdvlv ndqwd hualvlwd r r lwd ndvdydd p CEwCE

d1s d0nq yd0r d/ y0E0E yhw0Ed y0E0E udylqwlvd

e1sɔŋ yɔɔ d/ sɔŋ yhwɔɔ sɔŋ uɔylqɔɔɔ

f1ydr d yd q c ydr vlq/ yhw d dnd s dng/ uylqvlw dnd s dng

Sluafoson gr shonxydnr o hwd sxxw/ olw dssx nr kwdd E -6s.

F, Sxxordm Nxlqnd p r qd sxxordm wqqllwmp hw GÖENCE wuyhkvlp GÖErnd and P lwÖE vñq wqqllwmp Nlumlwñd osxoh wqqllwmp lhqqh sxlgñq qlp hml Ödlw osx nr kwñq F1 -5s.

VX VWX O VX vmlp xnvæðhq rd wlp lqðæðhq xør qdr sslp lqh

G, P hwOE nhur nvhwHwl dndndnlwlnhur nvlw1
d1P InOE q dxhgh ydwsxxchBP lVdnd r ydwr p dwsxxqghB
e1P InOEQV hmp hunlM shqvdnhur nvhwB
f 1P lqnOEhqwOEhur nvhq dthq vxqqlwvB
g1P lqnOEmp hunlq dpgOEsr krnhur nvhwB
Nlumlw dwsxch ydwsxnvhwrd dlvOEssx nr kvddq G1-5s,

Nxyd : 1Vxqqlq vnkVCE nrr wllq dxwdd1Oxp l vnl nhwOE dldwddq/ p xwdr ssslwdr d vlovnllydd1

9PhwOEqxv1PhwOEy/ slv1

Oxr ndvxqqlwdr d r slvnhox p hwOE/ sshrOErd vnkV/ qllwOEvxoxnyd rd p xlvllqsdqr v1
Xnr vxqqlwdr d vlnr lxxv vlyhqvOE p p OE/ wOErd vxvxwdd r ssslwdr vlnhp p lq r p ddq
OEIp hwOE1

WOEExqqlwdr wlp lwdq ndkghq sdJq u kp lwoEVxqqlq vlnr lxxnvhdq r q hwOErd nhuOE
vlnrd nr xoxq OEIp hwOE p hwOE/ shlwOE QCEvnhw -nw1 dwdw dwd, nhuOE, r shwdrd
dqvdp ddq sxwllq rd u kp OErd nxyld p hwOE/ sslhq hlv/ lvsllwOE W/ osOErdnvhdq
nxydvxoxq vlnhp lhwOEhqm yllnr q vxqqlwdr d vlvOEhghq r ssslwghq r q vlnr lxxv vxwdd
nxyldw OEhwOEh nr xoxq vOenr wllq/ mwdq q yr lgddq vxwdd1

Vxqqlq dxhghd r q nrr sxuxddq p hwOErd dndd r q vOE OErdsslwqv1 Rshwdrdch
lp r lwdgxwdd vxqqlq o sxnm rd dqghwdd nhuOEwqCEvnhwsxwlvw -sxwllq qlp hwxwlvw, 1
Vxqqlwdr vhw vxvylknr r q nr vlnkvOECE

Nr xoxq OEIp hwOErdvnh uqvnhwOErdwdr nr vnxv0 rd ydvwvr o wydvwdr ydvwvxuhw1
Sr kgl u kp OE ndqwd/ hwOE lwoOEpgOEhul p hwOE/ sshrOErd nxyddp dwd rd nhuOE OEwOE
qCEvnhw1P xlvw/ hwOErdyhlwddq slhqOECEvnlvOErd p lhwOE, m p dkdq sxgr qqhlw1

41Nxyld ndqj dv +p OEw/ slkdrd/ sxr oxnd/ ndqhuyd/ nxyld/ sdmg ydr d/ rOECErd
vdp p ddq,

51Vkr uh ndqj dv +nxv1/ dhkvsxlghq vdp hw p xwlvnd/ vdp p ddw/ nr wnd/ kOE OECE

61Ohkw +dhkvsxlw sdmg/ nr wndd/ nhvOEslp hOEyxr nrr rd/ shqvdw,

Nxyd ; 1 Rssldw rwyd nxyld p hwCE hu rlvwd1 \ CEqwhwCEr d nxyldq ndqnddq CEhw d
dop hwCECEnnxvlyr lwr lwd wr uhwd ndcj dwd1 Nr whlqvd nd thkylqCEr d nr xoxq ylhulvhq sxur q
yduhw d1

Vwvxv oxndvqqld1 Vxqqld rsslcdw nr rwydw p xwdch ndurqj lch nxydwkxw
p hwcq/shlwQEQh r dydwndlnld vhw/ hwcEydhp p dcd r d nxyld ndaj dv/ nhvnhdExr uh
ndaj dv rd r lnhcd dkw1 Nxydw xw vhwllq rd nhwcq/whwqEwhw dlvhwllq ndurqj lch
r p phch/ dlp dhw vd nr qvhwlp xryld1 Nxydwkxw nr r wllq nr xoxq dcdq | kvlvhnl
qEwhd nv1

1PhwCEsslwqW1Sr krdnhur nvhq vdp p ddnhrd r66CE1NhyCE p hnlwp hwCEvCnd
p hwCE CEhw1

Vkqqlod r q nQv/ sr kmnhur nvhq othw d QSI rd qlp hw/ vop p ddb rd r6060EQQ5 CEhyQv
 nxllgx val kQvCEwghoohdb/ ydbq vdyhkvlydw xp lshlwhq ddb1 Vop p dthw yllkvlyQv
 ydunlvawhql ndyxsdndwd rd r6060Ewylwhydwbng ydb d1 P hwlwCEhyhwrd o knduhw
 vumdydw rlyld ndyxsdnnr rd qCEh othh1 Vop p dthw yllkvlyQv xvhlq nlylhq
 sr kmhwxqr ldd rd r6060hmoCErd QvMuxqr ldd1 P xlvw/ hwCEghq nhuCE lqh q hl nxxo
 mndp lhkhq r lnhxvllq/ ydbq qlwCEnhuCEv r shwrdq oxydd rd r shxwvunr lxnvhq ydq
 klylq slghwvCEvhw

D, hwl xwlp xvp hwCECSlhghwqCEwhwp hwCE | olvwCEp p dohnlwd

41nhr wdp p do

51n| qvlvdp p db

61vhlqGEp p do

71mnx p xx vxqqlwdb dvl vdb p db

Dvnd vdp p dcewhw vcecewhw/vnhwcevnlp xvdxwvch nr kvddg D1

Qlp h0E hulo vho h o s x o n 71 v o p p d d l

E, Hwl slhql qEhp dwdwd nlyhoEwdydwdrnEEOEdv h nr kvdq E1

F, NhyCE5 hnhq1 lqh1 Hwl p ddrwd nr kvl/ mlwd xpl r q vxqxvl P lVEnhyCE5
p hunhrCE5r lwoxwCE5qCE5Edxhwb P lqnCE5hwsdndwrydwm ydsdqd xphwb
Nlurdqlghlq nahl hualwdsdndnd r nhyCE5 p hunnlCE5sxnrd dlvCE5h nr kwldq F1

vw vwx Ovw vmlp xnvhæghq rd w lp lqgdæghq xør qdr ss lp lqhq

G, Nxxqvdh1 NhyCEhq p hwCEr q vEqqCECECE Klhqq| p p h vxqqlq dxdw ndnl
nxxqvdh1 ddq nr q hml p lqxxvml1 Sldq p lhdhml CEhw/mlvd nxxdwd nlundd qh sdq
ndqwd dssxh1 Odvd dssx nr kvdd G1

Nxyd <1 Sdlhq vxqvdh1 CEhq nr r wlvh1 Vdp p dhw dwdydnhlvd rd qlvCE kghwCEhmlq rd qlp hmlq1

; 1 PhwCExqMPhwCE ndvyl dhw rd qlghq hvlwld ylghr lp ddd

P hwCEdhr l khUCECECE nhyCEhq kxkvl nxxq dxdw/ p xwd ydwdqldqhq ndyxndxvl hl r dww
CEvhdq| wvEqvldq1 Odhml ydwdlq nr q h sxxdhd nxxvl/ p CEv/ rd kddsd, rd nr q h ydsxd
-p xvlnd/ srx dnd rd ndqhyd,1 Odhw dvr wldq u kp lhd1 Ylghr w ndvr wldq | kghwCE
vnxddydd vxqld drr ndwd1

Rkth vlvCECE=

P xr gr wlvddq u kp CE/mlwd r q ndml sldd1 Nxnq u kp CEdd | kghq dhdq -sxx vd ydsx,1
U| kp CEhml p hwCEvdxhhd/ mwd dthmlqvl/ rd vlvCE q k| yCEndyxwv vhd v| slvhwCE
ndyxsdndwd1 Odhw yr l hwCEvCEhvd nCEq| nCEhmp 1 drr qvr swl1, rd | kghwCE lhmlCE
dvr lvd/ mlvd dhw vhwCE

QCEhq vhwrdh sr krdv u kp CEvxxqqlwvdh qk| hq ylghr q/ mnd nxyddq nCEq| nCECE
Ylghr hvlwvdh dhd rd vq ndyxsdndd1 Ylghr d yr lgddq nxydd dhd/ vq hddq p sCEwvCE
dhwqvr hunhCEd nhwv d vlp hqlwCEp dumlwd rd nxnlwd rd vq p hunlvvhwCEkp lvdh rd
p xlhd hdd lhd1\ nvl vd xvdp sl u kp CE rCEh w lp ll nhwv ddd/ ylghr wr q vdnr lxxv ndvr d
drr ndwd/ mlvq CEvxydd lkp lvdCEhd r dh RN qCEwCEYlghr vd vxqld1 K dumlwvd ylghr q
dldwv nxydd v| kghCE vvd/ ylghr q slwvvr q 506 p lqxxwd1

Vkqqlq d sxxvl ylghr q nxydqxwvdh vq r shwvdh Z kdwDsslwd rd nlumlwd ylhmlq
drr ndq rd u kp CE rCEh vq qlp hvl

Vkqr dylr lgddq | kghwCEu kp CE ndqwd1 Nlumlwvdh dssxh u kp CE rCEh wvd | kghwCE
dylr lnd mndvhd slwv4043 vq p xndd/ p lvd kCE r vddwvl vlvCECE1

<PhwCEqW1Ndylr nxydlh q val nhuCEh q1

Rshwvwxqqlvhp dq p xnddq rsslav rvd rkrdxwlv nhuCE hdoer nr hp dq 4/K,1
UllkIndor q nr xoxwd nhuCE, ndylr mn r gljlvdbvhwlv val shuqvlvhwlv nhuCE CECErd
suCECE CECErdval nr r wxx m r shvaxlvwlv sxlwlv/ yduylwlv/ uxr krydulvhwlv ndylwlv rd
p xxvdp dwdvdp p dchvwd1NllvhwCECE nr nr hp dq ulwCE58 chv1

Rsslav r d rchwx rkrthwrd chvwd ndylr q vnhp lvhq J r r j d Fwvur p lwd1 Vxqqq
daxwd nxnlq rsslav vnl skylvh q qp latsxq rd vlvhq p hqlp p h nhvCEvhq CEp hwCE/
mwd nhuCEp p h rkrthv rd kdumlvhp p h nxylvhq r wlv lwd1 Kdumlvhp p h nxydp dq
nhvCEllsr d/ mnd r d dqr d uxr krydulvhwlv ndyl/ mwd r d m nxnlqv qCE ylvwCE Rsslav
nr ur vlvllq/ hwCEndylv nxydvhp slvCEsr ylvwv ndylq ylvhch rd CEhch r wlv dq nxydv1
Rsslav dqqhvlv vlvwCEM r wlv vlvnd CEInxyd vlvCEchhp sl nxyd ndylwlv rd vhw
ndvxsndvwd1Nxydvhlvllv r shvchv vxqqq o sxm rd dylr lllq | kghwCEhwCEllwCEce
nCEq| nCE nxyd p lqdvxxghvndylr q vnhp lvhq1

Vdxxnnr 41Chvwd nhuCECEwCEd nxydvylwlv chvwd

VXVWX OVXvmlp xnvhvdh q rd w lp lqqdvh q xor qdr sslp lqh q

Nxyd 431NhyCEllsr q nxydþ lwdCElp hwCECE vðqd ndylr q vnhp lwCE

431PhwCEqWlPddwrvhw/sduhlwllq1

Vkqqlq dænm nr nr r qqxvæq | kvnlvhq dæ læxnvhhq1Vkqqlæd wlp lwdq vxwq sdq ndqwd1
Rsslææh rdhwæq p r qlw/ mwd r q vnkVCErd p xrylsxwl qCEwllghq nhuxxw ydwlq1
Rsslææd r q 63 plqxxwld dndd phwCECErd ær ndwd 48 plqxxwld qCEwllghq
nr nr dþ lvhhq dylr lqldææææ1

VnkVCEyr lgðq r wæd r vðvl r sslæqhq dylr lqld rd dææd mndvhwæd nr kgdæd slwlvhwæd
dylr lgd nxvq ydwlqldqhq nr h1

Rsslææh rdhwæ vnkVCEp r qlwlv vxuædyææd vlyææ=

P h w O E n h y O E v h a O E u h w n h a O E

HwI s d l q n d q w d p h w O E h u d l d d l r l w d / m n d r q p d l q w x r k h l v h w d d w d w d 1
O x r n d w d n r n r d w n q h s d l q n d q w d s l h q h n v l o x r q w r q O E w h q n v l 1 N h u O E o p O E O E d l d w
s x w l l q y d r y d w l Q O E w h q s d h u l d y l r l g d d q n r n h q d 1

41 HwI s l h q h w r n d q s d w h w q h x a m q h q n d n l w d n r o p h w d q h x a m d n d y d w d y d w d
a h w a p p h r d d v O E l v O E h w O E d y s s x w d / m n d s x g r w d v l n v l a O E k v h q O E

51 HwI n d y l / m n d d v O E v l / l o e h q d y x a d / r v l v l w O E q O E n s x w l l q 1 O e p O E n e p | o e
s x x a d h a O E v l h q h q / m n d v n h h l o e p l O E s x x q s l q q d a h B R v l s l h q l q O E n v l
n x y d p x n d d q 1

61 P h w O E q O E w O E h u d l v h w d n d n n l q d y x r g h q d n r l q d / h w l y O E q v O E n r o p h d m d l
m n d n h u r y d w n h y O E v O E

71 Y d u x l a d r q s x l q h q y d u l / m n d q d s v k w d v l v h w h w d - K X R P \$, a O E n l v n q n d d q
v l v l y d u x r d 1 HwI n r o p h w d h u y d u x w d s l h q l q O E n O e p O E n e | k g h w O E n
n x n d q x s s x r d h q B

81 C h s O E n x u l w d r q v l s s h O E v r y l d e d n l h u h r d / m n h q d n s O E h y O E r v l d n k v l y l k u h O E
v a h n q u x q n r r q v d / y d d q s x g r w d y d w d n k v l y O E y l k u h l q O E h w l q O E n d n s O E d n k g l w O E
- h u y d n s O E k d u p d d n s O E r d s l h q l w O E n O E | p O E w O E s x x w q h w d h p l n x n l q r l w d

91 N h y O E l l s r q d n k g h w s | v l y O E y l k u h l q O E s l w d y h q r d v n x n n l d n d v l q n h y O E O E h w l
n x n l q w r d d n k w l

: 1 N h y O E n d y d w n x l y l a d s d n r l a d r d n x l y x h w d d q p x u h q h y d w k h a s r w l HwI q O E n
n d k g h w d h u l p d d w d n d y d w d r O E O E h w d r d | k g h w O E s l g h q r n l a d n d y d w d
a h w d 1

; 1 P r q h w p h w O E n d y l a h n x n n l y d w n h y O E O E h w l n h q w O E h u r n v h q a h l w d n x n n l y d
a h n d r d r v l q l l w O E q O E n h w l

< 1 o p p d w r r y d w p r q l y x r w l d r d s l v l y O E y l k u h l q O E O E w d y h q 1 HwI q O E n h w
n l q v l o p p d w d / n d k x q v o p p d w d / n h u r w o p p d w d r d v h l q O e p p d w d r d
n r w h l a d s d n r l a d y l l k v l y O E a O E k v l o p p d w d 1 R v l s l h q h w q O E n h w d h l w d 1

431 N h y O E O E h a p h w d v O E v y O E HwI p h u n n h O E p h w O E a O E h a p w O E q l v O E n O E O E
- M o e q o e v l r O E s , 1 R v l o e p O E O E p h u n l w p x n d d q 1

441 K d m w d h a d r q p h w O E a O E n h O E r r d 1 HwI a k r w a d h q h q a k r w a p d d s x x w d /
r v l a k r q q h w d s x x w d s d a h q p x n d d q 1 - o e p O E n e u x n r a k r w a d q r d
y d n r a k r w a d q d k h x w a p d d a k r d ,

451 N h y O E O E n k v l s l g h q v l o p x w d n h d y d w d x x g h w d n k g h w n d y d y d w q r s h d w l
d , HwI q O E n h w s x x w d / m n d n k g h w s x k n h y d w d n d v l q r d n x n d q x s x w
d x n h d y d w n r k v d 1

e , HwI q O E n d n k v l s x x w d / m n d n x n n l n h a u O E q y l k u h l q n x n l q / y d n n d
d n k v O E n y l h O E d n x u l n d d q 1

f , HwI r n v d / m n d k l l h q n r u y d w r y d w p x x w x p d w d d n k g l n v l r d q O E v O E
n h O E n k g O E q y l k w r d 2 y d w r d

W X W W X O V X w l p x n v h a d q h q r d w l p l q d d a q h q x o n r q d r s s l p l q h q

Nxyd 441 Oop p lq VXWVX P DD Onxwmlnd nhuCEmlq qCEvmlvEndnlnd xnr vnkvdCEnd nrr wllq
dxwddh sCECE srxwd1 UkhhyCECEOop p lq Elr sj lvhq dhp dq | p sCEwssCEepvl sdonq dhrnd1
VWkvj 43B534<1

Nxyd 451 ; Oxr ndndvlwng dlnnlp lhdqhq
nlvd vnkvlq yduq wvfwddq 49B534<

Nxyd 461: Oxr ndndvlwng sdllq vnkvdCEBxwvml
Rvdnd ul kp lwdCEvmlwllq dxwdd nrr vdl skdnd/
p xwd vxxd rd nlundv dklqnr vlnlyCEvmlvCE
kddwlydd1VWkvj 4: B534<1

Ullklnndr q nrxowd vCECE vnkvdCEvlnvmlq : Oxr ndndvlwng vmlqCErd oxr nlnd ; O<
dlnnlp lhdvngCEnlvdqd1 VWkvjCEr vrlwkwvl vlnCEvml vnkvdCEvml rd rsslndw vlnlyCEvmlvCE
p lhdndCE1VWqqlq nhw 78 p lqxxwld r d klhp dq dk| wddvlnvowd vxd r vdn nllh1

Rsslalghq sdaxvlp hwCEsslvxqqhlwld=
NhuCEq | kghvCE: Oxr ndnd sdaxvml nlundvhwv rd p xlnd oxr nlnd vxxdwd sdaxvmlnd1
Vxxulq r vdr sslndw slw p hwCEqqhlwld rd p hql vlqgh p lhdndCE1VWkvjCEr dydwllwqCE
rd ydq kduyrlq rCE dlnnd dlnnd vjvlyvCE Rsslndw nxydMydw wqvlnnd nllqqr wdylnm/
r shwlydlnm/ huldlnm/ prqlsxdlnm rd kddwlylnm1 Rvd rsslndw wlyrl ylhCE
vhyrhp sICEr krnlvd rd qlghq vdnhp sdd | kvlwCECElnCEp lwdCERp d sdu p hwCEqqhlnd r d
p lhxlvw/ p xwd nxq sdhvw vnkvlq ul kp lCEqllq vh hl dgd wlp lqxvl Rsslndwvlyr lydw
p hwCEqvlnndp | os ; 1oxr ndnd1

Mixed Mqxqhq

Okr qwn| g| q volur lwx r q volurvd yd kdvndydxvlnCElvh nCE| nCElvhvd okr qqr wd1
Nxx lkp hwnq ndqdydwr ydwdyr lqqd rd r o vxuycdqh/ r ssip lwhlq vdsckwx1 Vkwrd
hdp hqwnCEv lwhvd yCElq yr l xnwvd dgd mvdhlg xxwd r slwvdd1 Vd qllq xvhlq nCE
mnd vdscknvhd/ okr qqr wd/ okr qqr wdd1 WCEv hlvwxw qrvlnvdd hvlvlnv
CE| p sCEv wCEv dghkvyld dqvrd hllq vhnCEv dvnvdd xvhlv dxdnd/ p xvlvlgdd/
v v lvnCEv rd dlnvdd p xvlvlnq vdkglwd1

WCE n|s| r q vxxqqlvwx 4 0 6 0xrvldon1 Khsrw p xrn dwdylwd p xlon
ydkdvdndydxvlnElohn rd oxqwn|y|wvlnhyCE k|yCE p|os nrxxalvlon/ qxr udon rd
dnxlvlon1

Okr qqr wd hul dikhnr nr qdvwgghwqlyr xwydwdqvwvdxlvhoed vdydod | kvnhq1Hl r dñ shonr d
vllvEhwOEh p lnOEsdkvx p dñp dñndqoxr ndwd/ rOEydlq p dñp dñndqoxr nnddq1Ndñnl
nhur vwx rdñhvwxx1

W05E dylor qv n| s| uwh05E yd k d v n d y d x w x x q q l v n p d q r s s l p l v h q d x h l w d 05E y d w
n d n n l y l l v = V x n l q r d v l p l q | p s 05E w s 05E / n d y d q 2 d l n x q r d n h k l w q / l q d l v x q p r q h w
p x r q r w n l h q u n d v p d d 05E d v h n 05E l q 05E p h i g 05E | k v l v o e p h l

Uhhwv hq qe x v r s s l p d d q 1 K d y d q q r l g d d q w d y l o r q w d n d s x k x w d q s d n n d q q x l w d /
p x w d y d w d y l d u h n c f r l n d r q k l y c f q w r v x w d n d n n l q d y x r g h q d n r l q d 1 O x r q w n c s l l q
r q k l y c f d u d d n d y c f q e v x q w n r k v h w d / p l h n c f s x r o v r l w d / m w d p d k g r o v h w d q
n l l u h w e v x q g h o d l

P xnddq thvnlhssxxq scholddq QF p lqvCEp hxxd vnp r vsxw wd/ thvnlp xnlw shkp r dnx
kllul/ vr up lqxn nh vobvdqhq vnnCEp lqr lxxnd othmxyld dqqxlwd1 + xon oxr nnd1l OA
r sslp dvludbwOA othm ulwOA dqqxwOA ydlv/ kdchnd/ nCE| vlnnd/ p xwvudwv/ vobvdqhq/
sxxnllsrCE ydusxhq rql1 Oxp lvho2n| p CEvCEp xxvp d p dnxddwv lwxp lwd
QF p lwdCE CE1

vwXvwX OvwXvmlp xnvhadqhq rd wlp lqddadqhq xør qdr ss lp lqh q

VX VWX OVK vmlp xnvhæghq rd w lp lqgdæghq xnr qdr ss lp lqhq

Hmp hurnl@xα 41
CEEkhnCEE p h p hwCEE
 +U| yø| wdsxlvwcbq nCEE|q) utivlq,

Ullrich, W. (1997). *Die deutsche Sprache*. Berlin: Springer.

~~+Monxvivida.~~

ö+J osw l ur kp / wbyl x r q w r q v r slydw vcbdw
Mxd d M q w q h q 1

ö +P dıvd Nur nı r u,

Odxoxrhq rGhnhq nxxqqhoadq rd ndwhoadq | p sCEh/ qCE | noevCECE nhvCE val p lWCEB
Odsvhwvdydvnhuwrd rd rhnd kalydqwrddq1\ dhqvCEnxxox daqxq CECEvnyhkglvCE vlv
dqxrdd1 Mlv qCE | rGhCEexp hwd/ vxwlvddq qlvCECEnvhq/ p hwCEllhq/ r udydq/ daqxqB
VnyhkglvCECECEnvCEklUCER udyld/ daqxrd rh1 OdsvhwvnyhkwlyCExvhq p | o sxlvd 0 rd
p xlvd 0 p lhdCE1 Dld r q p | o s mnhq lkdwhvdyd/ r d nxlqnd kd p dld val o vndvd
klyCECEM o sld r q klyCEykyldw/ nxlqnd klhq w kh r ydwrdhvdqhwp hwCE vchnd rd
nxlqnd lkdqld kh qCEwCECEox qqr wd1 Rgsd nlyd r o vCECEvdy | kghwCEhngCE ndqwa\$

Qqvxrlrq vqyluxr nlqvcs dndcd r q xvhlq xvhlvd dqvwd nhucdcdq1 Dvhwvcdq sr αq uhxqcdq/ mwd qCgCEf dqqxwvd wlvhp p h' hlnCE ad r klwh nxonhyllhq vhwCE KhCEfCEf uhvnlhsxq vlnxwd p dnddyd kllul1 Vh wcdh cwnhp cdq ndlnnl uhvhwCEfhw/ nxlvwd ndlnnl yCEf sr vhwcd1 -wCE CEv lwnlqhq uwxcd vlvwx mndvhwcd oxr qv uhvhwCE Rshwcd cslvoh oxnp CECEf ndlnnl wcdydwkxr p lrlgxlnl1 Cdxwcdq klluhonlq ö -Kllul p lwd p dcdp d2K dqghn Kxr yl) Vr lð Shnlce1

Qqvxrlrq vqyluxr nlqvcs dndcd r q xvhlq xvhlvd dqvwd nhucdcdq1 Dvhwvcdq sr αq uhxqcdq/ mwd qCgCEf dqqxwvd wlvhp p h' hlnCE ad r klwh nxonhyllhq vhwCE KhCEfCEf uhvnlhsxq vlnxwd p dnddyd kllul1 Vh wcdh cwnhp cdq ndlnnl uhvhwCEfhw/ nxlvwd ndlnnl yCEf sr vhwcd1 -wCE CEv lwnlqhq uwxcd vlvwx mndvhwcd oxr qv uhvhwCE Rshwcd cslvoh oxnp CECEf ndlnnl wcdydwkxr p lrlgxlnl1 Cdxwcdq klluhonlq ö -Kllul p lwd p dcdp d2K dqghn Kxr yl) Vr lð Shnlce1

Dlnxlqhq r wdd uhsxwdd p | os dqwrlhq nxyld1 Qlp hwee dqqxwdd dhwddq qh ndlnnlhq
qCEvQd1Mlv osvhw r ydwyCEQnCEe wwxqhhp sl d o r qqr wd thwldndwCEnxychr uwhndyr l
r o d | kvCEp r qwd nxlq osvlchlg1 +Doh nr o hyxr vldghq u kp CECE q | dhqvCEp dhvp lwddq
45 ddwdd, Ndwr vddq/ qCE | noenhwee vdp dqqCEdwCExr nlqvdsdndwB

Ndyhwddq uhsxwdd p hxxp xnlw1 Odvnhwddq qh/ ulwCECE ydvp dw/ mndvhdwB Odhmr ulw
yr lydwvp ld p | os p xnlqdbvldq p hxxd ndbghwddw1 Qdvwddq CE slp CECEp hxxwdd rd
ndwddq dqwrlhq uxr nlqvdsdndq w xkxrd1P h/ | kghwCEp hlgCE u kp CEsr uxrndqd1

P hxxkhvnhq rCEnhq r q sdndwddq
slhql r p dhkvlqhq vhsdwddw rd vhhq r q
vwxvlvhdw1 Hwvlvhw n | o CECEl o d d
r q k | yCECEvCEddq slvCEe sdnr lddq
r o d1 Mlv v | qv | dhlnhCEkhlwCEg | vCE
qlklq1

Nxq r q dnd sdwdd sCECEr glon/
nr r wddq osvhwCEnhq | kvnhq1Dlnxlvhq
vdxwdd nxunwdd vdwlgwdd\$
+v r up lqxnnd v o v | Vh vhuylkvl osvld/
dxd d vvv | qvCE rd vlvnhq yr l p p h
lkdwdd kCEhq yCEv/wCEvCE QCEwCE
vdwlgvldh kCEhq dhmxycvdd1 M yCECE
nxxwdd/ hwCEr qnr kCEhdCEr dwn | o CE
vCECEvdyhqdB Ydnhd d vCEe uxr ndwB
NdyhvlwB Odkop p h dqqxnd dxdq
o Vdwlgw rd vdschnd +v r l o Shunl o e1
\ nvl vCEhweulwCEslhqlon p dqlr w/
yr lgddq r shwdd d vCE nxq dxd nCE
vwxp p dhv1

Nxyd 41UvnhCEvnhq p hxxkhvnl1

Vlvnhq r qnlq m dnd sdwdd sCECEr glon1Vdqr vddq khlsd dqvdsdndw/ dqqxl o n p hwCEn1
Vdwlgvldhnlq w l yr vlvddq p xndy d vdy | sCECEQCEgCEe vdw\$

WXVWX OVXvnlp xnvhdwghq rd w lp lqqdwghq x o r qdr s slp lghq

Vr yhæxnvld ydqkhp p læh æsvlæh

Ydqkhp slhq ævnhq ndqwd uhvnhq nxæx yr l r æd nxvæhxlqnlq vdp d1 ClvCEæyr lgddq dlnnlCE
hmp hunlrv wlp lqqdævld2dlrxqqdævld | kvnlvælnnhæ

Klssdd hl dlnlvCE vlvhqnCEæ ukr nlqvæsdndq ylhuhwCE hwnl kCElvCE dqværd1 Mvædq
vlyxp p dæd1 MvæqlwilyCEhknCElhp dvæ hghæCExydvælvæ æxælvæ/ khlgCEyr lgddq vCEæCE
qllæCE

%æææ/vkdumlvæv%æv sll k| ylg ær qqr q kôydlqqr lqvlq rd dqværhq væundææxq1 Kdumlvævæ
r dæq lvh vlvhCEæ | wlvæ shævlnCEæ ær qvæhvndlvæ xvlvæ nhværd yllnr wd1 Mndqhq r væd
r p dæ/ lvhæh p lhælvhq kôydlqqr lqvæsdndq1 %Klædvvæv dædd q| v% æxvnhvæ ndlnnl
nhvnlwlyCE klædvnhq væundææxq rd qæxlvnhææxq1 Hl sækhvæ/ hl næklqæd/ hl dlnæd
dlnhkgqlvCEvæp ænlq yr l kæxlvævædæ vææhd rd nhvnlwlyCEydlq nxxqvæhæp lvhæq1 Væd vlvæCE
p dævæd lvæd1 Rææq khvnl klædvnhq rd nxq kæxlvææq væhdvlq nr r æh/ væd vædv sæxæhlg/
hmp 1 nxnlq yxv r ææq nhvæd mænxq kôydlqvævæd1 VCEævææh nr nhp ænvhql p ændæq
p lhælvhq ævllql rd vnhq wlvæp lqhq hvlævlvæd sædnr lvæd/ qllq hvlævlvæd ær qvæ nr kvælvæd
p ævæp | æp p p ævhr lvæd rd næsxqnl | p sCEææævCEydlq dvCEæp lhæqnlqværd1

Lvp slhq ævnhq ndvæd yr lgddq yæv nxydvæ uhvnhæCEdqværd rd ukr nlqvæsdlnndd1 SllvæCE
uhvnhwCElvCEæp lvCEæp lhæhæq1 ClvCEæxyddæ æsvhq nhvæp dæ/ mrv kCE mævæq uhlvævæ
nhværd1 Mænxq yædvhp dævæ dæqxqnlq yr l sllvæCEæ mrv mrvæ r q nllqqr væqxwlvhævCE ææ
dæqxvæ dvCEæ yr lgddq | kghwCEævævæd yævndæ dæxvnlvævæd iæhværd dæqxlvæd1 æææydvæ
dæxvnlvævæd -hmp 1%æqæxwCEæhvæCEæ yr lgddq nxxqæhæd uhvnhæCEæværhæq dæqxvæhæ ææ | æævæ
yCEææ p ælgæqnlq1 VCEævævæd p | æv slhælp p ævæhævæydværd nxxqvævæydvæ | æhævæænr ydvæ
kæææææ1

yhghq mēw p lvs lwhhvhhq

Wd yr lwhhw

Dnlylvhwl r wdkxrp lrr q nhp lq r shxwxqqlvnp dq vlV5vchhw4/ V5/ V8 rd V9 vhnCE
r shxwxqqlvnp dq vlrv lwhw4/ V6/ V8/ V9/ W/ W47 rd W481

[illegible]

Dnlylvhmlq yrl wvxwd nhp lq r shwd | nvl/ vlcE ssldqhndw| dwGE shxwd r q
CElqqCEv/ep r qlwhq vnr ddr vdw vhnCEv/ep r qlwhq r ssldvnlv|p|nlwCE Wlvdbd
chylvhlmlq yrl wvxwd p|oe elr sjldq vd |vlndq r shwd1 Vko whq dnxw rd
wv vxycddr ylgdb vkqCE |oe hlp hnlvl p dlv dvlndq vxqql

Dnwy/vhw/ vrsll sddkdvq vrvxvhwvchvl vdyhoel/ moelq xqvcl vl r66Eyr/lgddq kohhd
xonr d1P In06 v6 06r r dnp dkgv dwd/ yrl r shwv dhwk G66E d r d schwlp hwd rlp xundvl
qlh/06hy/ hwl dhw/vhwvd yduh1

DnwlvlhnlwCE405 rsslwqlnd rd vh vxr ulwvldq 607 rsslwqlnd q kp lwoCE DnwlvlhnlwCE
k|og|qqhCE xonrqd rsslp lwd rd q kp CfosCE Rvldq n|v|p|nlwCE rsslwqlnd yr lydw
kdannld whrd qhnlwCEmoe lq nCElvCE p|oeqlj lwlvrnd

www.vwvlp.xnvhæghq.nd.vvlp.lqgdæghq.xør.qdr.sslp.lqhq

Dnlylvhlw r q vdnr lxxv w vxwdd vxudydwl=Rsslcdwrdhddq u kp llq1 Rshwrd rhdd
mndlvhn r sslcdh vlqlvhq p r qlwhq +Qlv 41/ r sslcdw krlh +Qlv 51 vhnOE/oe vx wlvq
vndwvx Qp r qlwhq +Qlv 611RsslcdwvnyOEvlqlvhq p r qlwhq vkwOEslhqu kp OE
WkwOE mkgdwvnydywv/oe vxwddq1 WkwOEhq rdlh r sslcdwlp lydw r sslcdw krlh
p xnddq1V/oe w vxwvnhq rdlh r sslcdw sr klydw/oe vx nld u kp OErd nludydqh
|oe p r qlwhvhlh1V/oe vx nlvnOEgOE s xod OE | kvlvhlw/nr nr oxr ndq nhvnhq1

PdvUdddwrdyOEghw#

rdp xwdd vll oxvrd rd qllah nhuOEvdwldw/	
vdhndur r vld/	6 { 583p onhlvlqavl/
QdF d	6 { OE sap lwdl/
drdwlvq/	6 { avldxyd/
nhlvw dny /	5 { kdlkgxvvp dard/
nOzsdshld/	6 { 583p op lwdavl/
p ddauqvhlsslOE	5 { uxr ndoxvlndd/
n qOE	
avnlq/	
uxxvxsdsdhld1	

Nxydw4rd 51Rsslcdwlp lwdydwOE sssld rOEhr nlvw1

Vxwlvddq vxr æq rd vr nhulq ydl nxxnvl d yghq ræp lvs lwnhvhhq1
 Vdhndur r vl wlddqlh q vr nhul2uxr nr vr nhul2soæwæ nhul,/ F₄₅K₅₅R₄₄/ r q glvchndulgi hð vr nhul/ mnd
 nr r wxx ndkghwæ vr nhul p r ðn| | ðwæ Vh vlvææ vlnæ khghæ æ nhuld +uxnwrvld, hwæ
 ð sæm nhuld -j ænrvld, rd vlvæ r q p p 1 ndnlwd khghæ lwæ p dumlwd rd ylkdaqhnlwd1
 Vdhndur r vld ydæ lwnvddq p xwndæwæ vr nhulæxundæwæ rd vr nhulæxwæ1 Vdhndur r vl æxnhqh
 yhvhhq k|ylq rd vñq vdd xghæh qæ|yllq/ nxq yghq kdkgxwæ sr lvi Dæ r q vdhndur r vñq
 p xr gr wæp lvh q thdwl | kvææZ Inlp hgl dFr p p r qv/ 91131534< FF E\ 0VD 6B « Ehj dæwæ33: ,=

Udnhqvhhq shuxwlnhæ vdhndur r vl r q=

d, p r ðn| | ð| kglw/ nr vnd= bbbbbb
 e, lr q| kglw/ nr vnd= bbbbbb
 f, p hæw/ nr vnd= bbbbbb

Vdhndur r vl r q=

d, hsæj dæqlq q | kglw/ nr vnd= bbbbbb
 e, r ð dæqlq q | kglw/ nr vnd= bbbbbb

Lkp lvh q r kxwæ d q vlvæ l qæ hlvææ dhndudlvh qw| | p l æmnd slænr r vdhndur r vñq j ænrv lnl rd
 iuxnwrv lnl1 Vr ækhaj lvv ydæ lwæ j ænrv lnl bbbbbb rd vxr wæd vñqæm yxwæ
 bbbbbb/ mnd yhu nxlwæd nhxknr lkl q xæ vkhaj lvwææm1 l uxnwrv l vdv
 vlv/ | yhvqhnhur q p xndæd p dhvæd/ mnd vlvæ vñk gæ j ænrv lnl Rvd iuxnwrv lnl ææ
 p xwæp dæd j ænrv lnl rd vlvæ n æm ææ vr ækhaj lvvnh q vxr wæd1 Qldæwæd iuxnwrv lñq
 qæwlp lvhæ r q vlvh| ghæ kdvæwæd ydl nxxnvl/ vlvæv q r wæd p p 1 dvl æv dæwæd v| slq 5
 glæh lvvnh q1

Qdwl xp n æ ugi -soæwæ æ2uxr ndæ æ/ QdF æ r q vlvæm q p æwln ææææ æy d vxr æ l ævæ vlvæ
 n æm ææ vlv/ lv q vlvæ æd1 Qdwl xp n æ ugi ææv| p p 1 p hlvhghææd n ær shæææp xwæ vlvæ
 yr l gæd p | ææ ydæ lwæd qhæwæ l q lvhæv q d yxæd vxr ækæsr wæ rd qdwl xp k| gur nvlglwæ1 QdFo
 æxnhqh k|ylq yhvhhq rd vñq vdd qæ|yllq kdkgxwæ ææ yghq sr lvi Dæ r q nxyd QdF ædh q lvhæwæ
 æZ Inlp hgl dFr p p r qv/ 91131534<1 FF E\ 6B Dævæ u=Euxf hææv, =

Udnhqvhhq shuxwlnhæ QdFor q=

d, p r ðn| | ð| kglw/ nr vnd= bbbbbb
 e, lr q| kglw/ nr vnd= bbbbbb
 f, p hæw/ nr vnd= bbbbbb
 QdFor q=
 d, hsæj dæqlq q | kglw/ nr vnd= bbbbbb
 e, r ð dæqlq q | kglw/ nr vnd= bbbbbb

Qdwl xp r q lkp lvhæ y ææ ææ/ p xwæ vxlwæd slv lxxnvlwæ kdvæh q d qh1 Vlvææv l vddq p p 1
 hdp lwææ qhvlwæd æd q r q ææh q rd khup r r ærh q wlp l qæd1 Qldæh q qdwl xp l q vddq
 nxlvqhnl q q r wæd yhvæd qhæwæ rd æwæd vj gænr kvævnhæ1

6 { 583p onhvlqæM/ 6 { æF sop lwdu/ 6 { æMvxyd/ ræF xundd wæ æqwd rd
qllæh nhUævdwldw/ vohndur r vld/ QæFæ dæwldq/ nhlwædy/ 5 { kdkgxwvp dæd/ 6 { 583p o
p lwæM/ 5 { uxr ndævlnnd/ næFsdshuld/ p dædUqvlsslæEn/ qæFævnlq/ uxxwæsdshuld
41R vlnr æ h nhvnhqæFæ vdp dænr nr lwædwldæ/ hlp 16 { 583p onhvlqæMd1
51P hunlwh dwldwæxubydwl=æFææFæ vr nhU/ ræFæ vxr æ
61 Oævæ nxxqnlq dwldæq r p dæq dylr vl p xndæq vñq yhuæq ræFæ hwæEvh
p xr gr wæd 4 go yhwæFæ
71P lwæd| kghwæFædwldæ ræFæ slqwdæFæ sosædæ ræFæ vlæFæFæ sosædæ1
slqwdæFæ sosædæ=bbbbbbbbbbbbbbbbbb æF dwlvæd
vlæFæFæ sosædæ=bbbbbbbbbbbbbbbbbb æF dwlvæd
81 OæFævr nhUlp hunlvw| q dwldæq ræFæ xundæq vñndæq qr lq uxr ndævlnndæqhq
vohndur r vldæd vñnr lwævohndur r vl æMvxydæd ræFæ mxnnr r q1
91 OæFæxr æp hunlvw| q dwldæq ræFæ xundæq vñndæq qr lq uxr ndævlnndæqhq QæFæ
rd vñnr lwæ QæFææMvxydæd ræFæ mxnnr r q1
: 1Oævæ dæwldq næFævlq1
; 1P lwæd ndnnlhq dæwlv lghq ræFæ vlæFæFæ sosædæ dæd r dnydæ wææænr q p xndvhw1
P xlvæd s|| knlæFæFæ sop lwæd vlUw wæFæFædwldæwlv lvñhq1

<1æFæ vxæhwæd vlUwæFæxqnlq dwldæq vlæFæævr p dæq p lwææMlq rd p hunlwh wælyxxghw
| æs1

ræFæbbbbbbbbbb p oA ylvh wælyxxghq dylr lqqlwæ=bbbbbbbbbb p ohæ bbbbbbb (

ræFæ vr nhU=bbbbbbbbbp oA ylvh wælyxxghq dylr lqqlwæ=bbbbbbbbbp ohæ bbbbbb (

ræFæ vxr æ=bbbbbbbbbp oA ylvh wælyxxghq dylr lqqlwæ=bbbbbbbbbp ohæ bbbbbbb (Ylvhñq nhvldyr =bbbbbbbbbb (

431K dkgxwæyhm sr lv dæwlv lwææFæFæ vr nhUærd æFæFæ vxr æædkgxwævp dædwæd1

NxydædkkgxwævræFæqæwæFæ dædwædæFæ vr nhU=bbbbbbbbbbbbbbbbbbbbbbbbbbbbbbbbbb

NxydædkkgxwævræFæqæwæFæ dædwædæFæ vxr æ=bbbbbbbbbbbbbbbbbbbbbbbbbbbbbbbbbb

Vxwlp xnvhq vx nvhw dmkv sCEvhw

41P lvnq rCE vlvCE sosl p xxwxi hu dvlr lwb

bb

bb

bb

51P InCEvhwCEvCE sosl p xxw wCB

bb

bb

bb

61P lklq shuxwx QdFonCEvhwvhw xqCB

bb

bb

bb

71P lnl vr nhudHl yr l nCEvCEp dwd vlur lxnvhwb

bb

bb

81Mv QdFohl yr lwl hqCEvCEvhwvhw xqCB p InCEvq yr lml nr uydwb

bb

bb

91Sr kgl/ p lvnq vxr xq vl vr nhuq dCE lqhq ydlnxwv yghq nlhxp lslwlvnhq1

bb

bb

: 1 SiluCEvdp lwm vx nvwv yllgdq up p/ mwd dnd r q { dnhvwd d CE sosl | 0
dnhvwd/ nxp slnq dlnxydq dvlhnr qd1 Nxqnlq dwdq yllgdh ndqqdwd ydwd r p d yCE/
mwd vx nvhw q khssr hur wdw lvmwdq1

VXVWX OVXvmlp xnvhwqhq rd w lp lqqdwhq xnr qdr sslp lqh

WXWXX OVXwnlp xnvhødqhq rd w lp lqqdødqhq xør qdr s slp lqhq

Vhøhøyhq=

I r unqlqj vi Ź d 4=Ylønq i Œj Œvnr j hq sŽylqwuqB
Ql vnd vø ughd sŽylønq i Œj vrp Œydcqj dwl vnr j hq sŽylqwuq r fk ylond dægd i Œj hu
vr p i øhnr p p hul

Ql vnd vøy ehwŒj p d kxuql vnd j ød r fk ydg ql ehkøyhull | øl ir up xøhøhøgdq1

UXEULN -j h xqghuøøqlqj hq hq uxeuln,

bb

K | sr vlv -ghwql wr u Œyvdhw=Vh{ 1Y Žk| sr vlv Œdhwgq ydcqj dwl i Œj hq l vnr j hq sŽylqwuq
Œy l w

bb

P hw g -vŽk Œvndyl j ød,=

bb

bb

P dvl do-ghwk Œehkøyhuy l,=

bb

Uhvxødhwvnyly sur f hqwdhøq,=

bb

Vxwdw=

bb

Gl vnxwlr q -i øøøød uhvxødhwøq,=

bb

bb

bb

NŒø u=

I r urnqlqj vi Ź d 5= Ylond yCēvhu l vnr j hq Cēylqvluj uoēd B

Vlr dij hq gur j ql voxwlvhq dwwnr j hq Cēj uoē sŽylqvluj hi vhuvr p ghwi lqqv yCēvhu vr p Cēj uoēd sŽylqvluj 1Q Cēvhl vlrj Cēdwwl thgd sŽylond gh Cē

Ylond wCē/ exvndur f k ulv Cēylqvluj uoēd B

bb

Edvhuws ŽylCēvhu d l vnr j hq/ ylōhq vnr j w/s ehi lqqhuyl r w l B

bb

Vl thgd sŽylond yCēvhu vr p Cēylqvluj uoēd j hqr p dwj oēd yCēvhu vr ul
J oēv Žk Cē=

41Y Cēvhu wlvhq i oēy Cēvhu vlvq vxp sylw

51P dnhud uvlvq j hqr p dwir up d vq oēvhu vlvq nydgudwr f k vCēvhu slqqh l yduw
koēq

61X qghu oē ylond yCēvhu vr p ilqqv l uvlvq/ d y Cēg hq duv d vlvk r Cē

71X ssvnd vlvq vCēvhlqj vj ughq i oē yduh yCēvhl sur f hq w vnu y qhu l vlvh q
qhg d q

WX VVX OVX vnlp x nvh d qh q rd w lp lqq d qh q x nr qdr ss lp l qh q

HoEqwhq v| oeqoenvlOE nEwenvlOEnd nEnlOE

Mlxnr Vdpl

Vdyrlwhhw=

Sdndvhw r r vkwvhw kxr p lrr q r whq vOE CEchvylvhw/ yr lgddq vxr uwd hldvhw
| p sOEwvOE

Nrkvhdq yr l r ad hldvhw p hwOE p sOEwv/ dyr lp hw| p sOEwv -shw/ qlhw/ nr xoxq
nhqwOE sxlwvwnr xoxq slkd1

§r ssldp lvhq yxr ghqdr dwydxwv dwydlqw nr kvhlvq V4/ V5/ V5/ V6/ O4

§r ssldp lvhq uhhqgh ydxwv dwydlqqr q nOEwhq | q V4/ V5/ V6/ O4

§dlrxp lqhq oxr qqr wd -dlrxvddq nOEwhq -vd vxnmad, 1V4/ V4/ O6

§oxr qqr q kodylqqr lqw V4/ V45/ V6/ O4

§r ssld vxqqlwv ddp p lqnOEld nEnlOE nEwenvlOEnd v| oeqoenvlOE nEwenvlOEnd
hdq| p sOEwvOE V4/ V5/ V6/ O4

§v|oenhvhdq v| kp OE/O5

§vOE p xndqhq sxnhxwp lqhq O6

§vxnlvhr w rhq nOEwvnd vhw rhq hwlp lqhq V/ O7/ O8

Wf whx wx v=

VkwOE yr l vryhvd hu lnOEkvhd= shuxvr xoxq ddxr nld yr lgddq dlrxvddq nr nr
oxr nndq vdl shqlwOE | kp lwOEnr xoxq OE | p sOEwvOE Shuxvr xoxq ; 1oxr nld yr lgddq
v|oenhvhdq OE507 r ssldq v| kp lwOEnr xoxq OE | p sOEwvOE v| vnkOEslghp sl uhw
OEldxhq p hwOE v| shw dh1 \ OE r xoxwd vkwOE yr lgddq vrxwvddq p | ox qlq/ hwOE
nxvhdq udwvhdq p qhhd 405 r ssldvddq/ mvd r shwvdydwvddq dldvKh yr lydwvlp ld udwv
dldqvqxvmlqd v| kp ldd/ mvd vdsxydwvhdq

Dnvylvhwq ddrnrgdhv vryhvx sldkdvhq nhyOE vxnxndxghq dnxsr d/ mvd lq r q
w ghq OE v| p lq oxvdl WOE nEnlOE r q khssr kodyvddq rd shw ldd dlrxp lqhq r q
vddvdd1 Vdunr lvxnhqd r q r ssldxnr qdr d vwxvhdq vdy lvhq p ddr v|oenhvhdq | q1

V|oenhvhdq | q p ddrvwd yr lgddq nOEwOE405 r ssldvddq1 Oxr ndwd dlkhq nOEwhq | q
yr lgddq p ddr v|oenhvhdq r rhq nOEwOE4 r ssldvddq/ p lnOE vllkhq r q vdyhwdd1

\ p sOEwvOE rd oxr qqr qvhw rd dlrxvddq ddr xoxwd vhnOEelr o j ld rd dlrxvddq | OE r xoxwd
yr lydw vnkOE | kvlvwOE Kodydqv rhq vnr/ nluddq lqhq rd nOEwhq dlv| vhwv0 rd
ylvhwvOE nqr o j lddq1

Rssldvddq r q k| yOEhvddvddq p ddr vxqqlwvddq nr uwd vOE p xndvdsxnhxwp lwd1

P d whul d d d w n l y O e d q h h w =

Rshw d v n h h x r q w s r x q y d u h o n v k v O e r u l w h m p h u n l O l v n 41/ m l w d r q d w d w d
r d y d w d d w m n r q O e w h q O e w d n x y d q d O l v n 51 v k v O e r u l w h q r k r h 1 Rshw d v n h h
m n d v h q v k v O e r u l w h q T U o n r r g l q / m q n d y r l v k g O e h m p h u n l m l - k w s v 2 2 z z z 1 u
n r r g l v l 2 h w v l y x , v l y x w r o l 1 N r s l r l g d d k d x v q v l y x w q r v r l w / o l v h d d q v h T U o n r r g l
n h q w O e r d x r g d d n r r g l 1 Rshw d v n h h y d w x v o p d n h h q v d y d k w h k w l v h w r s s l o d w
y r l y d w n l u d d y d w x n v h y l k n r r q 1

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§ r u d y d q v l o p O e n O e l
§ n O e l v i n d q v l o p O e n O e l
§ n O e l d q q x q v l o p O e n O e l
§ k l u y h q v l o p O e q q l q r n v d q r v d
§ v i n h h q x o w l w d
§ p h w r q x o w l w d

O p d m d s x k h d q / m w d r q
T U o n r r g l q x n l r d
O p x l w l l q s d q r y O e q h w
O y d w x v o p d n h v d
y l k n r

D n w y l w h h w l =

§ r s h w d o l w d h x n O e h q q O e w h v 2 n x y d w n l v l p | n v l q h h q x r q w s r x q y d u h h q 1 \ O e r x o x q
r s s l o d o n r h v d d q y d w x v o p d n h / m w d r q r k r h w x v v k v O e r v x r u w d p l v h q r d m k r q
n l u n l v h d d q u d w h q y d w x n v h w
§ r h v d d q r s s l o d w 7 k h q j h q u l k p l l q | O e r x o x w d / d o h r x o x w d x r q w s r o n x n l h u h v O e r
| k g h v O e l k p O e v O e
§ m n d v h o n u l k p O e n d o l v x v d w l / u h l w n l h u h v O e r p | o s O e s y O e r d u l k p O e n O e y O e
r O e h w / n v h w O e n d n l o d u d w l o d
§ r s s l o d w y d w d y d w y d w x v o p d n h h o n u d w h q n l v l p | n v l q 1 D o h r x o x q r s s l o d g h q n d q w d
n h n x w h o d d q h o p l w O e d q O e w l w O e
§ n r n r d h v l v h h q n h w r 7 3 0 < 3 p l q x x w d / u d w l d n d 6 0 8 p l q x x w d 2 u d w l
§ n d n n l h q n l h u h w l O e r q w s r x q / v u n d w h d d q y d w x n v h w d n h n x w h o d d q q l l w O e
§ u h h q w O e x o h d d q p d w r w d r d k o y d q q r l g d d h o l e y h q r o n l O e r o e v O e d v o e q o e v O e
§ q l l v O e r l g d d q w x q l w d s d n d q s O e O e d n x y d o q l l v O e d v x r u w d v x q l w x v x r n l w d

D u y l r l q w l =

§ v h x u d d q w x q l v h l y l v x x w d p l v h q r s s l o d r v d o w x v l o e n h q v n q | q r d r v r l w d n l l q q r w x w d
d k h h m h q ,
§ l w h d y l r l q w l r s s l o d d u y l r l r p d d v l o e n h q v n q O e p d w r w d / x r n d w d r d s r k v l p l v O e k O e r q
r s s l q x w x r u w d h d d q d h v l v h h w d 1 R s s l o d y r l d q w d s d o x v h w d / p l v h q k O e n r n l
d h v l v h h q , 1
§ y h u d d u y l r l q w l u l k p O e r O e h q w d y r l y d w r l w h q v l o e n h q v n q O e
§ n l u d v h h q n r n h h h q y r l g d d q o l w d n l v l p | v 2 n l v l p | n v l O e d k h h w d

W X W X O V X m l p x n v h o d q h q r d w l p l q d o d q h q x o n r q d r s s l p l q h q

VXVWX OVXvmlp xnvhædqhq rd w lp lqqdædqhq xonr qdr s slp lqhq

§r wlydq v| op CEnCE|

VX VVVX OVX wlp x nvhæqhq rd w lp lqqæqhq xør qdr sslp lqhq

Wxvwx Ovkwnlp xnvhdqhq rd w lp lqgdqhq xnr qdr sslp lghq

WDOYHQ OXP R 0 VOCEnd xp lwxwnlp xnvd

Vdu Wbsr rEyl rdNdWlp p hdOYCEvnCE

WDYRLWWHHW

Wdylvhq xrqwrq vwxwxp lghq vhnCErslvddq vnhp CE | nvlqnhuwlvd kdydqwr rd | p sCEwvCE Rslvddq vnhp CE | nvlqnhuwlvd xrqqr qvlhvdMCE vwnlp xnvd rd nCEwCE CE vwnlp xvyCEghvCErslvddq nlundp ddq wxo nvd rd vnhp CE qllwCE kvhgyhwr rd rd p dkr dmd sCEhp ICE

Rshxvxxqqlvhp dq vdyr lwhhvelr σ j ldq r vdv

- W6 Vdyr lwhqd r q r knd r sslvddq vwnlp ddq hddghq vr shxwp lwd hul hddq p sCEwklq rd | p p CECE CE hulvwhq hddq p sCEwvhp p hnlv/v xrqqr q p r qlp xr wlvxxghd1
- O7 Prqlxnxvwd nhklvCE elr σ jlvhq vnhwq/ nxyvhq/ nddyrlghq rd dndqr kvlvwhq xxvwhq vhnCEhulvwhq r sslp lv p sCEwvhp dyxod1 Kdumlvhddq | nvlqnhuwlwhq vwnlp xwhq vnhp lwCEd udr ur lqvcl1
- O8 K | oel qghCE dhvxxqqlvwr krhp ld' vwxvxdq hulvllq dthklq rd udhqvlghq yhuodxxq1Kdumlvhddq nulwvCEhgr qkdqnlqvdd rd hlv/vwhq rd vnhwq wr wdp lwd1
- Q. Oxr qrvkvwhq nhklwlp lghq p dwnnCEvwhq dyxod rd kdx ydinxwdd r p ddq CE | p sCEwvhp1K hCEvCE dyr vwxwr p dd CE | p sCEwvCEr kvddq1
- V4 Elr σ j lghq vwnlp xv>Oxr qqr qvlhvdvwhq vwnlp xnvq udhqvlhwhq vwxwxp lghq

DNWLY LWHHWL WRWHXWXV

2 ' ' # * : 1oxr nndvhw

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2 ! '% & * vdyr/ xqvdr dvl k | yCE d

OVkgCE uhvl CE | p sCEwvhp xnr qd r sslp lghq,1 Rsslvdw vnhyCE vwnlp xnvwmnr sdhvdq vd u kp lwCEsdJ2u kp CEce1

CDIndd vrvxvnhq nxox 68078 p lq xnr qd . 78 p lq vxw whq nCEwhq | q mnr xnr qd vd vlvCE

Kddvhdq r q vh/ hwCEr vwxv ullsxx vCECEnd xp lwdqvhwd1

PDVHULDDQVMDY, QGHW

Wduylnnh2u kp OE
Sp lwaqdkd/
§nhssl/
§OE sop lwal/
Sp xr yluMd -qr lq 8 go

Rsslodw r wdydw or ndwd p xnddqv vxnlp xvyOEghw rd vlnhyOE vnkOE r qlwhq
vxnlp xwnkOE+Qlvn 411

Hqvp p OEhq vlyxq vnkOE r ydw lwa vnkOE r lwa vlyxod r q sr kglq vnkOE
Nxq vnkOE r q vnk// sdu2u kp OE/mwvnyOE r nludydwp xlon vx nvhqv rd qh nhOE
| kvlvhq sr krdq vx xon val vOenb/hq dxwdq1

Wdyhwl dnlvlyhqd r dnyd ornd r q rshvnx vxqqlwd dq rd nOE vny/ qlghq vhyll vvp lwaE
vdylyhwd or qqr wd dndvhp p lwd vxqqlwd1 -Vlv hl r dn nOE vny/ r sslodwyr lydw hwlOE
ornd ssdwd val lqvnuhwlOE r qlghq vdyhwl vhyll vvp lwaE rd1 Rsslodwydwhyd
| kghq ornd vnkOE r OE9/ mngnd hlvnyOE r xlon rd nhur ydwsr kglq rddq p lvhq xpp hq
p OE r sxxvyr l ydnxwd hOE hq hqr or vxvnlq1

Nxq r sslodw mwnyOE vx or nld qlq vdp dnd nhvxwvndq vOE rd lpp dwrq hur lwd rd vlwE
p lwdqhq r q v/ slodqhq vdy Vxp hwd rd vlwE hwr qnr hqOE v/ slodwE yld1 Yr lgddq
yhuwl p | or vldw rhq -hmp hunlwl lpp dlvnhqdlvll, dyxod Sr kmv0 rd HvnOE/r p hq
lpp dwrq hur rd1

QlvnkOE yr lgddq p | or hwlOE dlvnhqdlv rhq vlyxod vlv rd vlwE p lqnOE lghq vdy
r q r orwmp hunlwl 43 yxr vlv rhq val vlv lq nxq r sslodw ydw| qvqghw r yhuwl dq qlwE
vlv rd q| n| khvnhq1 -Nr ur vlv dq r sslodw/ hwrE nvlwE hq kydqvr slvnhq vundwvnx hl
nhur lpp dwrq qp xxv rhwv1
P HgOE VKVWX Qvdy vxnlp xwd hl ylvOE dnyr lqxwvkgOE r vnd hl r dn orqv1

Rdp p h vnkqhwhxudydq vxxqqlvndq vdyhd r gr vlvwvdp p h=

Yduvddq dndndnvl r sslvqvld/ r sslvqqlwyr lydw or mnr elr or j lddval p dqvlvhwd1

Vxxqqlvndp p h or ndvdr nvl : 1 or ndvld/ p xwd p | or 80 1 or ndvlvhwr lydw vnkOE
vknOE

VXVWX OVXvnlp xnvhdqhq rd wlp lqddqhq xonr qdr sslp lghq

Vxvmlp xnvhq ddxwd r krlwlddq vlvkVCErd nhur vddq vdyr lwlvhw/ vlvhq rdhvddq r ssladdw
uj kp llq/ dqqhvddq vlvkVCEsdhulwrd uj kp CEhr nr dydwp xnddqvd vxvmlp xvyCEghvrt

Vlvhq CEghVCE xar v hmlp hunlml CElp hwCEq vd slkddh/ sdlnnddq p lwCE q xqvrt

Rssladdw vlnhyCE vlvkVCE vlvkVCEsdhulq dyxat/ mqrnd rCEvhq sdavddq xrnnddq rd
nCEgCEq CEI vxar nvhw/yhualddq qllvCErd nhvnxwlvddq qllvCE

QvCEr p p hqwl=

VlvkVCEyr lgddq | kvlvqCEhwCEshuxvnr xaxwd w vxwdd ydlnd mnd yxr vl 71 xrnndw ; 0<1
xrnndh vdp ddd dlnndq vdyhw/ mair lq sCEVCE yhuallp ddd msd 809 yxr ghq hulallvd
vdylvCE

VCEq vxvmlp xnvhq yr lml dlwCEp | ar wlvhq nr xaxq hul sxr dnd Vxr p hdd rd vlvkCErnqnxq
xrnndq ndqwd vlvkVCEvdp ddd ddnr kvdd rd yhuall vxar nvd hmlp hunlml Vh| shq ndxwrt

QLVH=VlvkVCEp r qlvln

WKKWY, PRQLWH

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P l v m d d x p h q v | y | | v p l w d q x k d d d r d n h s l o E n d k g h w d h u d i v w d s d n d w d / h m p h u n l n l
v d r q y l h u w E v d s x x q d d d r d d y r l p h o d s d n d w d O d w d d d u d w r l n h d d q n r k w d d q r d
n x y d n d d p l n C s d n n d r q n | v h w C E

	83 f p 04p	58083 f p	43058 f p	8043 f p	P d d r q y d n r l q h q	H l α q w d
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S d n n d 4= bbbbbb

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** " ' #&% # % ' + (" " % * + * ") * / ! " (* & " * (") * \$ # #) *
#- \$ & %
+ H m p > n r y d d / s h k p h C E n h y | w C E s d q d y d d / p C E n C E s x k g d w d / u r v n d w d / y d n r l w d / k d u p d d d d ,
bbbbb
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* * " # \$ ' 0 * # * S i v C E E C E s o p l w d d n d n l p l q x x w d m n d s d n d w d l
§ C E s s o d x o n q d r d bbbbbb F £ 1
§ C E s s o d r d s d n d q p d d q s l q q d w d bbbbbb F £ 1
§ C E s s o d r d x p h q v i v C E bbbbbb F £ 1
§ P l w C E u r r d k x r p d l w n C E s o d l w d B bbbbbb
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p h w C E | v bbbbbb

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u l h n r bbbbbb

WX VWX OVX wlp x nv h d q h q r d w l p l q d d q h q x o n r q d r s s l p l q h q

VX VWX OVWvmp xnvhæqhq rd w lp lqddæqhq xmr qdr ss lp lqhq

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vwvwvw ovxwmlp xnvhæqhq rdwlp lqqdæqhq xør qdr sslp lqhq

VXWVX OXI WHQ

OxiwOxi hq vOxi nOxi khwrfk hq iOxi xwOxi qaj iOxi dy p hq Oxi gŽ r i v hq dewwchwhch1 P Ž h w p h g Oxi w h q g h d h q y d u g Oxi oxi dwi Oxi d xssp Oxi n v d p khw h q y l g v h p d w j h q r p d w d q y Oxi g d v Ž Oxi e h n d q v l v r p q l d w Oxi Oxi Žaj w Oxi V r p v h p d Oxi oxi w h q y Oxi Ž h q g h r f k f h q w b i d h w u l q r p p Žaj d r d n d y h n q v n d s v r p Ź h q r f k Oxi r f n v Ž s Ž h w h o h u d q q d w Oxi q Oxi d u d q g h l i d u d r d n d Oxi Oxi q h q 1 V h p d w h u e n g h u p Žaj v l g l j d x v j Žaj v s x q n v h u i oxi i r u n q l a j v l q u n d v r f k d h w y h u d q g h y Oxi h n q v n d s d j w l q Oxi d q g h 1 P d q n d q x q g h u o e d oxi w h q v i l v n d v n d h j h q v n d s h u r f k r e v h u y h u d i h q r p h q h o h u n r q f h q w h u d v l j s Ž oxi w y d v h w h q r f k d q d q v h u d d y p l o oxi v n y d v h w r f k v l o w i Ž a g 1 f d q g d v l g d q n d q oxi w Oxi h q d q y Oxi g d v v r p h w u h g v n d s i oxi d w i r w j u d h u d r e h n w r f k p h g k r Oxi s d y i d j i r w j u d h u l a j n d q r e h n w h q x q g h u o e d v i Ź q r d n d s h u s h n w y 1

W h p d w e Ž g d x v e l o q l a j v g d j d u r u g q d g h v l i h e u d l O p d u v y l g K h o l a j i r w x q l y h u l v h w f d p s x v l Y l n 1 G h q i o e w d x v e l o q l a j v g d j h q v d h w y l v h w k d g h y d a v s Ž e d l v d y o e v n h p Ž v r p g h o v d u d j d y x q g h u x v e l o q l a j h q v l q d g d q g h v h p l q d l x p 1 X s s j l i v h u d v v h p d y d l h u d g h i Ź q e l r l q g l n d v h u y Oxi h u r f k p r oxi / oxi w y d v h w h u i r Oxi d u h u l a j p h g k r Oxi s d y i d j i r w j u d h u l G d j h q e o e n d g h p h g d w e h n d q v l v l j p h g y d u d q g d r f k p h g d w g h o l q v l j l v p Ž u x s s h u s Ž e d l v d y r d n d v o j v y l q g d u l D o d i l f n h q o s s p h g h q v o j v y l q g w u q d g r / e u l v f l n o q r f k s d w d g y l q g y d s Ž p d q v n x o h u o e d v l j r f k k d d n d g d q d o x g v r p y l q g h q l i Ź d r f k s Ž v Ž y l v k l w d l q h j h q j u x s s 1 Y l e h n d q v d g h r w r f n v Ž n r u w p h g k x u p d q d q y Oxi g h u h q g u o e d h r f k p h g h j d u d i o e d w i d j d g u o e d h 1

l o e p l g g d j h q v n r q w r o h u i o e y h u n d j d g h v v r p h q J S V o u h q v h u l a j l v p Ž u x s s h u l q Oxi p Ź h w h u o Y l n f d p s x v l L w Oxi v l o g h n r q w r o h u v r p x v i o e g h v v r Oxi w Oxi g l j w i l f n d o d j u x s s h u v r Oxi d s u r y d s Ž d w i d j d g u o e d h v l o d p p d q v p h g x v e l o d h q / w r w d w g h w h p h o d j v g x j j h j d q g h 1 Y l w j i d j i r w j u d h u i Ź q r d n d k o e g h u r f k e l o g y l q n o d N x y d 4, 1 G h w x w p w j y d u h j u x s s h q s u r j u d p h u d j i d j q l a j i o e d w w d p o l q g d v i o e d w w h q d h n x q q d j o e d h q g l j l w d l v p r g h o d

H i v h u p l g g d j h q k d g h u h w y h u d v i o e i u l g l v n x w l r q v d p w e h k d q g d a j r f k d q d q v d y i d j i r w j u d h u d 1 W o j Oxi d j w i d q q v v Ž Oxi g h e l o g h u v r p j u x s s h u d v r Oxi d k d g h v d l w r f k h (h p s h o g d v i Ź q J x p v Oxi w e r v d q l v n d w Oxi Ž i g i Ź q k o e v h q r f k y l q v h u q 1 D y l v h w y d u d w h u e n g d u g v n d s r f k h u d h q k h w r f k y l g d h d w e h n d q v l v l j p h g r d n d p h w g h u i o e g l j l w d y l v x d v h u l a j 1 W y Oxi x q a g y h n y l l q v h v n q l v n d s u r e d p y l o h w i o e r u d h d g h x v p d q l a j d u i o e h i v h u p l g g d j h q v l g v e h o l G Oxi p h g i d q q v g h w p l q g u h v l g Oxi v Oxi n w i o e d o p Oxi g l v n x w l r q r f k i o e d w j Ž l j h q r p i o e p l g g d j h q v n r q w r o h u l X v p d q l a j d u k Oxi j h u d o l g l k r s p h g s u c h l v n d x s s j l i v h u p h q r d j y l o h Oxi g Ž d w i d j i r w j u d h u d q g h w n x o h y d u d h q g h o d y x v e l o q l a j h q s Ž j u x q g d y d w g h w Oxi v Ž Oxi q h v o s h u n l g d q g h 1 P h w r g h q h u e n g h u q Oxi d j h q q l d

VXWVX OXI WHQ V h p d w e Ž g d x v e l o q l a j v g d j d u r u g q d g h v l i h e u d l O p d u v y l g K h o l a j i r w x q l y h u l v h w f d p s x v l Y l n 1 G h q i o e w d x v e l o q l a j v g d j h q v d h w y l v h w k d g h y d a v s Ž e d l v d y o e v n h p Ž v r p g h o v d u d j d y x q g h u x v e l o q l a j h q v l q d g d q g h v h p l q d l x p 1 X s s j l i v h u d v v h p d y d l h u d g h i Ź q e l r l q g l n d v h u y Oxi h u r f k p r oxi / oxi w y d v h w h u i r Oxi d u h u l a j p h g k r Oxi s d y i d j i r w j u d h u l G d j h q e o e n d g h p h g d w e h n d q v l v l j p h g y d u d q g d r f k p h g d w g h o l q v l j l v p Ž u x s s h u s Ž e d l v d y r d n d v o j v y l q g d u l D o d i l f n h q o s s p h g h q v o j v y l q g w u q d g r / e u l v f l n o q r f k s d w d g y l q g y d s Ž p d q v n x o h u o e d v l j r f k k d d n d g d q d o x g v r p y l q g h q l i Ź d r f k s Ž v Ž y l v k l w d l q h j h q j u x s s 1 Y l e h n d q v d g h r w r f n v Ž n r u w p h g k x u p d q d q y Oxi g h u h q g u o e d h r f k p h g h j d u d i o e d w i d j d g u o e d h 1

vlavQFaj Žaj wQFv ioe ir unqlaj vlqunvqg rfk chvlyhucqgh lqQFqlaj lqr p vžyQF
qduxyhmqvndshu v p vlavh{hp shoelqnr qwt

Xqghu ghq dggud xvelqqlaj vgdj hq vlvqgh yl gh chvlylvlvnu vrp QFduqd kdgh sčqhudv
Dnlylvlvnuqd ydu sčqhudgh phg xvjžaj vsxqnw l dčv iužq vp žedqvshgdj rjln vlav
j|p qdMhxqghuylvqlaj 1 Sž ioeplggdj hq xqghuoevln yl oximydčvlnq jhqr p dww vl
vqcsuryhu iužq fdp sxvhw qQFp lœœrfk xqghuœœd kxu p|fnhwœvexuqd sdulnœdu gh
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hivlvup lggdj hq ilfn yl xwœœd ir unqlaj vlqunvqgh prœ0rfk yQFhnr qwr œhu gQFyl eœdg
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rfk iœœyhundj dqghwdy gh p qfndghv yQF Ghwi dqqv j r wvp vlg dwwglvnxvlnud chvlylvlvnuqd
rfk ixqghud kxu chvlylvlvnuqd nxqgh dvyQFgdv sž rœnd wqglhu sž hwwQF qhvœshunuldqgh
vœœv ž yhuœj ydu vlvp dvhw iudj žaj rfk iœœp lq hj hq ghoylœœdj vœœnd dœœ QFduh vrp
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Elœ 41 Yl p žœgh uhj qež du rfk vnlfnqgh kQFqlaj du vlœœxqj gr p duqd sž ndp dwwlvlnmq
+Ulwdqhq 48'634<, 1

VXVWX OVXvnlp xnvhœqghq rd w lp lqqdœqghq xœr qdr ss lp lqhq

VX WAX OWX vmlp xnvhøqhq rd w lp lqgdøqhq xør qdr sslp lqhq

%SLOYLOSHUNDQWDL% Sloyl0 rd v000lkhlgq slwvw ønhqvhø 2udwlvudw ydukdlnvdydwvln0Evløh1

Mixdd Mqvxqhq

Qxr ulp p dlvhq ndqwd dlvxnvhød vlvxwvdy0Evlvøhø/ xvhlgq ør qvr uhvnhø) xør lørhø
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døp xs0E0Evhø dlnqd1

Ydukdlnvdydwvwxqqlvøp d q r sslp lvhq dæhlwv ykylp p lq rydwhlv0E%Vxvlg rd vlp lq
|p s0Ewv0E% %Ndydø/ dlnxq rd nhklv/q%vhn0E%0E dvxq p r qhwpxr gr v0\ kghw0E
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0æsvxunlv/ r0E0E|p 0æxnvwv/ nxxp dlvhw0Ehv r vsxø wv/ klxvøhndsxø/ vlvknhsxø rd/
mlwv vlvhønddvhø y0Ehø p xndlvhwv0Ehøvhwv y0Edlgxwv p xxwydvødvwv øp lqr lvxrd
yø nxyldlvølvwv slylv0E0E øp lqr lgxvnxvdyw0E0E hunlv0Evn0E dnxvøwv rd nøsvlvø 0E
v vlvvlyddq) løp d vlvndlvødyvhwv1

Udvlv=SLOYL

Nxlqnd slghwp xr gr wxydw

Vlv0E0E0Ehøv mlgq dlvxø v kp 0Edd yøp lvwv r p d slghø 0æsvxunlvrd1 -Vlvkv0E0E q
nhklvøwv rd n0E0E|w dlvhølv Mvql Ydvldlvhø vlghsdnlvødø ydukdlnvdydwvln0Evhø
sdlvwv1

Hqvlq svxunlvø 0ælvwvø 0E p lqv0E yhw0E Vlvhq vlvqhv vlvknøxlvwvø klxvøhndd
nxvdywøp dø slhøklxvndlvø/ mlvø løp dwd r q1 Svunlv ndqv l s0E0E rd ndqghøv r0E0E rd
nxvdywøp dø nr unhøp slhø løp dhvur lvhq ylvø0E s0E0E løp d1 Vlvnnr rd kvdydvwv/ p lv0E
svxunlvvøsvkwx1P lv0Esvkwx/ nxq ndqv qr vlvwvø sr lvB

Udwl=HULODLVHMSLOYHW

P lqnCdlVd huldVd slgYlOE r l r æd r dwp dwdBP lqnCdlVd slgYlOE dwn qCEqhMBQCEwlnæq| w
slgYlOE RYdwnr slgYhwYCEdlVCE ÆYr lnr qllyOE| ægCE Yr lnr qllyhq sCECEwædB Væwlnæd
huldVd nxyld slgYlOE LwH wæ wlg r p lwd lqwdj uð 0xylwæq q163 huldVd slgYlnxydd1
R dwnr qCEqhwnxylhq slgYlOE Vundwlnæd Æ dñq vlyxwæd wæ wlnæd, nxydd/ r vdlwlnr
vlnlwd nxyld slgYhw nr unxvCEwYlnvnhqB P lncE r q vlqxq dñp slslyhMB Vdwnr
p xr gr wlnæd q kp CECEqh slgYhq2vdghslgYhq2æp lklxvædhqB

Udwl=S, LY, QV, ,

P lqnCdlhq vCECECE r qB Udwlæd r q ndqvlr/ mwd æp lqr lwxæd vCEBkhVd nxyld1 VlnCE
shuqvlVCE vCE p er dñw/ hwCEYCEp lq dkhvnhq dñwYlOE LwH wæ wlg Sdsxqhlq
nxydsdqnlwæ n| p p hq lCenxyld yxr ghqdnlwæ/ vCEwCE wæqvlwæ/ yCEhVCE yddwlnwæ/ r dsd
p xndq p xxwæp ld uxr nlchq/ nxvq rCEwlnvæwæd nxss lndæd wæ Õnr vnd mnxv sCEYCE
vCECEwæd nxyld mnlq v| æCECE nxyld p lhdh1 Nxyldq dyxæd vCECE q hknCEhæp sl
nhur d uxqvdwæd p lq/ nhqvlw v| qv| slhq lCEdlqr lwhlq1 Ods vhwædydwnr r wæd nxyld
udwlæd r dñdæd dæwæd2p dæd q r p d q SCEYCE vCEO nr r wlnq/ mnd ydæ nxyldwæ/ mwd
q kp CEYr lydw yhwæd w lwnqvd %CEduwæd%nd hknCEwævCEYr lgdq w lwdæd xvlæd
nhur læd/ mæ lq p xr gr wæx gædæd hmlsCEYlq vCEwCE

Udwl=LCPDMRVD KHQJ LY PPH

NCECEslwCEvhaqh rd nhnlwYnCEkhvnhV dñw p d q læ dd | p sCECEqh1 Yr lnr vVCE
kdwæd/ p d wæd wæ wæqvlwæB QCE| nœlæp æB P læVd CEYlCenxæwln 0 p læVd CEYlCEæd
nxæwlnæB Yr lgdq p | æ ænhæd ndæsdæd nludwæ %Qlp æv Slyhqæxp ææ% hlp hunlV
ænx/ mwd Qlp æv ylhæwCE| qv p CECEYlCE1

Udwlæd ydæwæd p xxwæp d p dñx0æd lwxæp dæwæd/ ydæwlnq n| p CECE p CECEhædCE

Udwl=VDMVHQNDUL

Wlnr lwnx vlnhændulwæ rd wlvCECEYæp lwdæd r p d vlnhændul1 Oæp lqr lwxæd ydæ0 wæ
sllur vxyd vlnhændulwæ/ mwd vlnhændulq yCEw r lnhædæd rCEwYlnvhwCE Ullsæxh
yxrg hqdæwæ rd sdndwæ/ vCE CEYr lgdq w lwnæd hlp hunlV ær qqr qv dñwæd wæ/ nxnlq
udwæd hV yCEvhaqCEwæd hV p dñwæd wæ/ hlp 1 sxqdqhq udwæd nCE lwæEnhæd qhq nhshlæ
ylkuCEhæglwæ vlq lqhq nlylæCEqh1 Yr lgdq p | æ p dæwæd vlnhændulwæ yhwYCEhæCEwæ
sllwCE dñxlæd1 Vxlknæxæ lwdæd yr l r æd ydæ lly yCEæxæ nvh/ mndæd vlnhændulq yr l
vxlknæwæd rCEwæd æp hæn wæ yddædæd ndæd æh1
Vlnhændulwæ r q dñp d xnr p xnlwæd rd væxlwæd1 U| kp CE r p dæd vlnhændulwæd yr l wæ vlq
dæwæd mnlq qlp l wæ | dñCEYlhw/ mndæd vlnhændulwæd yr l wæ vlq

Wæ WæX O Væ wlnp xnvædæqhq rd w l p lqædæqhq ær qdr æslp lqhq

VX VWX OVK vmlp xnvhæðghq rd w lp lqðæðghq xør qdr ss lp lqhq

WDYRLWWHHW

plwvdrvd | kvwvcr xrnq ndqwd vxrh
vr sl d n e f q e r n h l w e

DNWLY LWHHWL

Rkrthw

Hwl lw hml nr q h vl qh dnr dnr dd/ mnd dxydwhu sxr dnd Vxr p hdlR vl khklq | kvh| wCE
hmp 1vr vl ddnvq p hglq dxdnd nnd nr dnr r ldn vCE dydqwr sCE dnd r vl r krthwv -p lnd
yllnr dnd vmlp xv vlkgCE/ p lklq dndd p lw dnvhwv uvlndq, 1

Yduqdgq hvkCEv nr r wvx ndkghw
r vdw=

Vdu/lnnhw

RVD4 V, , KDYDLQQRW

+CE/vCE | kvhvhq H{fh
vdxnrr q2l r up vSr krdd/ r shwrd or
vdxnr q rd rdd | kvh|wv xolnd Clqnlw
nr slr lvyddq vdxnrr q rd p dnhhvhq
vhnCE hmp hunnl vdxnr wd vcekrthgq
rdnhq +Vdxnrr 511KXRP \$Vdxnr wd
hmp hunnlqCE p dddqvdq rd vllwdq
vdxnrr / vhp | csnhsh vdp dddvhwvdxnrr sr rdd\$

NCE kdylqqr lvydlp lsvrd p lwvwydwvxnndh q CE r ssldghq ndqwd1 Vryl nhwCE
r ssldw p lwvwydwvnlndydwkdylqqr vdxnrr q p lqCE q yllnr qscCE
NCE CE | kvh|wv xonh vldqqlw rd r wdd mnd sCE vdnh hmp 1
vdr p dndv hq vCEyxwv nxychdssdxv qhvwCEnlwd qCE | v| nq qllh vldqqlv

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§CE ssvd

§slq|v| ghq shlwr +327/ 427/ 527/ 627/ 727,

§vdgh +hl vdghw2xp lvdgh2 uCEvCEdgh2yhlvdgh,

§vdghp CECEp p yhwCEf p oxqvd,

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§lq dqsdlq +kSd2p E,

§xv dnr yr lp dnxv -v| q|2 khlnnr vxd2 nr kvdallqhq vxd2 qdydnd vxd2 nr yd
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Hmp hunlwCEdydlqwsCEyCElumlwl=

Wdxoxnr 51 Hmp hunnl vCEdydlqwsCEyCElumlwl +P D rd WL1 Wxchq yr lp dhnxxwl
lp r lwydq vr xq - Qp hunnl yllwcdwxcdwl nnr r q +Wdxoxnr 41

VCEdydlqwrwxoxnr vCEnoevhqCE
Kxr p \$Nr slr l r p ddq nCEwceq\$

OH{f hqp xr gr wd=kws-22xup1124r GX

Ol r up vOddychnhqd=kws-22elw25p HeF43

WXVWX OVXvmlp xnvhdqhq rd w lp lqqdqqhq xonr qdr sslp lqhq

N, \ W QQ: QVRW V XVV=SRKGLQDD RQQLWXPLVHWD

VkVCEv vrvvmlq | kvvlw/œvCEnr ø hq nr xæq ndqwd1 Nr xæw vrvvlydw Kholqj lwCE
Xxghwchæsxqj lwd rd P lhklnnCECE

W vrvvrvhwd ndqqdwd vCEgCEllkhq/ hwCE lrvvrvhwsdkvlvlydwxxqqlæhqvdp dæq
yxr ur ndxghq dndæq rd p lrvvrvhqv yCECE dml qr lq 57 k1R sslwæqqlwærvydwrvhqvnlq
kædvrvvrd rd p lrvvrvhqvrvhqv dæp xæv/ r vdlævCECECE p ldp lrvvrvæ nvd r dml k| yCE
yhuæd p | œ hlp 1Lp dlvrvhqv ælvrvhqv p hqqlvlq kæydlqvrlklq -æqnl=
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Kæydlqvrvllnr q rævhhq

P xndæd r æhghq nr xærvhqv r shærvhqv rvhqv vændwærv lrvhqv l r up voh| vhhqv xærvnlq rd
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Vrvæærvhqv nCEææ r ø khæærvæ rd ræsslædvæ r æyævæ lqqrææqhlwæ nxyææp dæq rd
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Wd yr lwwhww

lp d q d d g x q r d p h x q x v m l p l q h q r p d v d o k l p s o e w o s v o e

Wær sll vnxuðyllq r shxwxqqlvnp dq nr kvlq=| p sOEwæssl yxr vlox ndw6091 Wk/ W49
rdW4: vhnOE/7 1

P ddyvhw yxr vloxr ndw: 1<1W5/ V8/ W/ W/ W/ W43 vlnOE6/ V7 rd V8

I | vllnndyxr vloxr ndw. D<1W4/ W8/ W9/ W/ W</ W43 rd W48 vlnCE/vCesw4/ V5 rd V81

Qxnlr g p d d q v h n h q n x u m l w J H4 P d d q d p x x v n v h w d r d J H5 V q l q h q s o d h h w d

Wf whx wx v

Dnrvlylwhw/vr sll dahr xoxq/ | CEr xoxq rd oxnlr r q1Wcedlw/ | | p sCEwae slq/ p ddaqvthgr q/ elr o j l d q rd i | v l n d q v d r l w h v l q rd v l v C E o k l q 1 D n r v l y l w h v l q y r l w r v h x w e d | p s C E y x r g h q / p x w d l k d q v h o h m q v d v h r q o p h q d n d q v h o h C E C e s h n d v s C y C E v l o C E C E h d y d n x w e d l o p d q v d w l n g h q u x q v d v h q 1 W o e v C E h l v w y n r h d n d r q q l l q o k | w h w C E n d n l w d v C E o v x k v l w d q C E v h v h q h l y C E v C E C E h k g l l o p d q v d w l n v d v u w x d l D n r v l y l w h w r q v x x q q l v o x q l l q / h w C E h q h k w l w r v h x w e d n o k g h q s h u C E n C E h q r s s l w x q q l - 5 { 7 8 p l q , d n d q d l M v o x n x r C E h w y n v h o h w l r q p o k g r o w d / y r l l o p d q v d w l n g h q v x v l p x v d M r l g h q d q v d r o d s l g h p s C E x o n r q d 1 Q C E k l x n d m d h k w l n l l q q l w y C E h q p o C E r d h u v l r d q v h q y h u d o x r q k h s r p s d d l

DmlylvhnlwCEr q r shxvp hqhvnp lwCEnCEsvCEu kp CE vl sdvlvæ xonr qd r ssip lqhq/ gljlvdlgr w vxvnyd r ssip lqhq/ j hr p hglvdlvrnq kaurdqqxwvp lqhq/ dlrxnp lqhq CEExr qqr wd/ vxvnlp xwæa vlnq hlvwCE lqhq vxvdlvhl vl nlurdlvhl/ Dmlylvhnlwvl yr l ydvdlvq r vdv/ mndr p ddr r shxvvl kp CEh vr sll vl vlkvCEvYr l rhdbr shxvvl kp CE vlvCE hul y kp lqg vlkvCEvM r shvdlq sdukdhv ndvr p ddr vlvdlv

WVWX OVXvnlp xnvhædghq rd wlp lqddæghq xør qdr ssp lqhq

Dn wylwhhw

Vkwnlvðq lp dðððd nðwððð nr qvñlp xryld rd slhqlðschðwñdMr lvd1 Vðp dðð vxr ulvððq ðlnhqghðlnhqvd rd p lvdðq p hoxd -w/ce 4, , ððlvðr q p lvdðp lvd ydunq yr lqðq ðgðv nðq| nnðð ghvððp lvdð 0r yhav hvp 1 Vr xqgP hvñl Vððð vxkvlghq vððhvd r vlvðq ðp lqðvñ -w/ce 5,1 Nr hðvñp dvd yðvðq ndvñ p lvdðvðp dð= | nvl ylñndvñ ðlnhqgðq| q vñq ððhv| ghvðð w lqhq ndxhp sðð ðlnhqvñwðYðkw hkv lvhvñ yr lqðq r vr lvdð mndvñ r sslðv kp ððñ hu p lvdðvñw/ mlgðq vxð nvd yhvððq1 Qllððx ulvðq p lvdv/ mñd vxð nvd vxvñvðq nr xoxvð1

Olwñqðr krñlghq ððñq vxvñp vxð p dñr/ mvd yr l nðwðððsxd vñwñq nhvðð lvhvð vñvðð wñq vðndvñxvð1

W/ce41lp dðððgðq vxvñp lqhq rd p hoxq p lvdðp lqhq

41Uðð nr qvñlp xrylq nhvñð 4fp { 4fp dðx r kxvñvñvððvð1

51Sr lvd nr qvñlp xrylq vðvðððh1Vðvð nr qvñlp xrylððð ðxqððð qllq/ hvððp dðx ð ðððððð rd qððððð| p xrylq nhvñðð, ðð nr vñð ðp dðx ðñq\$ -Lp dvd r ðyðvñxñndvñw ððððp lvdðvðp dðð ðp dðq nllqql1

61Olð dð nr qvñlp xryl schðwñvððq sr krðð/ qllq hvððp dðlqvðvðñ | ððððð1ððvð ndqvñ nllqql1

71P hvñwñ schðwñvððq p dððvññslððñ| qðððp hv rd p lvdðvðñnd1

81P hqhp lvdðvðñndð1Dyððñ| vñvñq sðndq vðð rd slgððvðððvñ wððñl 48 p lqxxvð1Yr lvdvñvð vððq p dððq vð vr slýðð dðvðð1

91Vr vðv r gr vñvñvð ðlnhqghðlnhqvð1Rvð dñdñvð ðð rd ðvñ ylghq p lqxxvð dðq ndññl r klñxñhyðv r r wvðñqhxvñ vð

: 1P lvdð ghvððp lvdðvð nðq| nðððsðndq ððñq yr lp dñxxv1Nlvd vxv1

; 1ððvð ndqvñ nllqql rd vxr vðð nr xoxð1

<ðvñ nr qvñlp xrylð sllwððð qðððð ððñq ghq klññndvñq p ðððð wñvñp lñvñ r lñvñ r slq dyxð1Nlvd vxv1

Vðylnñhñv=

ndqghððq vðð -4 mndvð

p lvdðvðñndð nr kghq,/

nr qvñlp xryl -qr lq 9 { 6

fp 2v kp ðð

p dððvññsl/

yghqñvððvñw/

yllyr vñq/

nðq| nnððvñv dððr wvdyðvñq/

ð p dñv rdñ| qðð

wñvñp lñvñ r r ssl20nr r sshð1

~~n0Evesxr dnoh1~~

YlInnr p hwr ur σ j lqd

Mqqd Nl

Wdyr lw hhw

0 vnk gCElwh vCEdydqr rd slwCEhwr lwhw rd | p p CECE kodydqr rhq rd p lwatw rhq
p hunlvv vCEqpxw rhq vnhp lvhwCE-07/ 08, / + \ V6,
0 kdm lvatw vnhp CE lwh kdkp r vnhp ld vCEqpxw rhq +04,
0 yhuatw r p ld kodydqr rd Lp dlv rhq dlv rhq vCEhwp lhq kodydqr lkq/ vCEqpxw rhq rd
vhw lkq Vxr p hq vCEdkw rhq vnhp dhkCE i | vln dw + \ V48/ J H V6/ 07/ 08,

Wf whx vx v

0 dhwylv rhq yr l vwxw | CE xowd hmp 1p ddy rhq rd i | vln d vxqqlw | kvndd qlq/
hwCEdhwylv rhq wvwxw p ddy rhq vxqqlw rd vnr up lwatw rhq rd lq dhkCE
i | vln dw nCECE CE i | vln d vxqqlw
0 dhwylv rhq yr lgdd wvwxw p lwCEnr kvat oxxyr wvwxw/ rd vhw ddxw yr l
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vCEdydqr rd yr l vnk gCEnxndghq wv ndghq yllnr q ddy p ddy rhq r sslwq rhq
dxw d\ kvhqy hr q vnhp lv rhq dhwylv rhq σ xw vlyw | nv r sslwq
0 dhwylv rhq vlvCEglj lv rhq r slv hxd/ | nv q0 rd q kp CE rhq CE vnhCE xnr qd
r sslw lwatw CE l nCECE | wv lv rhq wv dylr lqqlq dxqd

Pdvatd rd yCEghw

0 hmp 1Qhwp r Z hkvhw q/ Udvsehu Slklq Vrhv KDW

0 hqr up r gxxd lq ddsdghq rd vkv rhq nr vwxghq p lwkv rhq

-p | CE mlw rhq vj nhp lwatw v vsv uvlh lwatw q p lwatw

0 CE sop lwatw/ vxdp lwatw/ vhw nr qhw

Dn wylw hhw

0 ylvw CECE nvlq -Lp dlv rhq dlv rhq vlyxw Or krnr sslatw dw lwCE

0 q kp CECE krnr sslatw dw lwCE

0 vCEdydqr wvxn r vxqqlw

0 vCEdydqr rhq nhCE lq rd nldp lq rhq vnhCECE qpxw rhq vnr nhudq yllnr wd/ r p ddy
vCEqpxw rhq dylr lq/ nhudq yllnr wd

0 | kvhqy hr kodydqr lwatw

0 lwhq CE krnr sslatw r p dwkvCE/ q kp CECE/ slqvl | ghq dylr lq/ vxdq

qr shxghq rd vxqddq dylr lq/ vxdq yr lp dhnxxghq p CECE lq

WVWVX OVXvlp xnvatghq rd w lp lqatghq xnr qdr sslp lq

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4, ydwh mnlq p lhdqnlqwlqhq s0505llp hyxr vlvð\$

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kðxðp dðd p lwðxvðhp dðdðd 0ðhp lðd1

0lv07kv0E sllw0E2 hwl 2 r vðnxyc/ mndvr sll v/qvlp 050507 v0Eðqqhp llq1

5, p lðd qhq v0Eð d/ nxq vlxðd r d hghðqhq v/qvlp 050507B

0ðdð vñgr w Lp dlvhnhq ðlvrvnhq vlyxlðd khwhðvkdýdlqqr w kðxðp dðd
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0lv07kv0E sllw0E2d vñ vxðxnnr ðlvrvnhqwr kñhp dðd glð up p l | kghw0E2d xvñp p dwd
vxxuhwðd + kghq yxr ur nðkghq dðdðd/ vxqqlq y0Eñlq.

6, p lðd dydlqqr lðd vðnr lwðdðqBR slvñhð=qhxyr rd kdydlqwr vxxuhvlq

~~+kwsv=22lq dlvhnhqðlvrv12qhxyr rd kdydlqwr vxxuhvlq,~~

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-khvndkodydqqr lwd, kodydqqr lqvwqqld Or shvndvnlwd vaxnr q hqhq
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-kwsv=22l~~CE~~ dlvnhq~~CE~~lvv12hxur sdq~~CE~~duwd, ndv~~CE~~g~~CE~~ v~~CE~~qqxwlv~~CE~~sd~~CE~~ / ~~CE~~nxq
r q vhxudydr ssvxqv-nlurndd shxw~~CE~~1Vkn~~CE~~hxudydkodydqqr wrndurndd qh=

41slqylhq p ~~CE~~CE~~CE~~hq duylr lqv; 2; dwhlnr ~~CE~~

51l~~CE~~ dqsdlqhq p lw~~CE~~xv -hvp 1Qh~~CE~~vp r Z h~~CE~~ku w~~CE~~mr q/ Udvsehu~~CE~~ Slklq Vhqvh
KDW0/hqvr up r gxx~~CE~~,

61vkv~~CE~~nvhq nr wvxghq p lw~~CE~~xv-r qqlwvx hgh~~CE~~lv~~CE~~mp hunh~~CE~~Ep | ~~CE~~
mlwchlq vj nhp lw~~CE~~hlwd vl vsr uwl~~CE~~h~~CE~~ lwd r q p lw~~CE~~lv

71~~CE~~ sosl~~CE~~q p lw~~CE~~xv

81vxx~~CE~~q vxxqcdq p lw~~CE~~xv vl duylr lqv

91vxx~~CE~~q yr lp dhnxxghq p lw~~CE~~xv vl duylr lqv

Mlv m~~CE~~hlq vxxuhw hl yr lgd p lw~~CE~~lv~~CE~~ v~~CE~~q yr l vnlwd ~~CE~~Ep p ~~CE~~ p lw~~CE~~kv~~CE~~hp dq
v~~CE~~gr lwd Lp dlvnhq ~~CE~~lvnvhq vlyx~~CE~~1

F, 51vqv=~~CE~~h~~CE~~duwdq uj kp ~~CE~~ r p dd v~~CE~~qqxwlv~~CE~~ v~~CE~~q khv~~CE~~lv~~CE~~ sdnd~~CE~~ vhw lklq vhn~~CE~~
Hxur sdq v~~CE~~duwdq1Nlurndd/ r dnr r p d hq~~CE~~xwlv~~CE~~q r qqlw~~CE~~qxwyd p xxw~~CE~~lnr mnlq
dld qllq/ hw~~CE~~gh~~CE~~lv~~CE~~q vxqqlq shxw~~CE~~lv~~CE~~h~~CE~~q~~CE~~xwlv~~CE~~h~~CE~~lv~~CE~~ hly~~CE~~CE~~CE~~gh~~CE~~h~~CE~~v~~CE~~
Qv~~CE~~kv~~CE~~Ev~~CE~~h~~CE~~ndd s~~CE~~CE~~CE~~ slvxw~~CE~~yllnr q dndq1

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41glj u~~CE~~ p lqd vx~~CE~~nvhnwxxghw vxxuhw=~~CE~~gdndd Lp dlvnhq ~~CE~~lvnvhq vlyx~~CE~~
~~CE~~Ep p ~~CE~~ p lw~~CE~~kv~~CE~~hp dq v~~CE~~gr wnr ~~CE~~ h~~CE~~gh~~CE~~lv~~CE~~h~~CE~~lv~~CE~~llnr ~~CE~~rd d~~CE~~lv~~CE~~CE~~CE~~ sxxq r p dw
kodydqr~~CE~~q~~CE~~h 0 Rshxvly=~~CE~~ H{f~~CE~~h~~CE~~ krhylv~~CE~~gr v~~CE~~ndd dsxd glj u~~CE~~ p lhq v~~CE~~nhp lvnhq
-kwsv=22r shxvly2v~~CE~~v~~CE~~ld~~CE~~lv2h{f~~CE~~h2 Kxr p \$ydhp p dwdydnr wdul dkh~~CE~~lv,

51~~CE~~k| wcd~~CE~~lv~~CE~~q duylr uj kp ~~CE~~ v~~CE~~qqxwlv~~CE~~h~~CE~~q v~~CE~~lvxvp lvhw

61 ~~CE~~k|w nxydxv v~~CE~~g~~CE~~lv~~CE~~lv~~CE~~klq hqlv~~CE~~q ydnxw~~CE~~qlw~~CE~~ v~~CE~~nlr~~CE~~lv~~CE~~CE~~CE~~-hvp 1 vj n~~CE~~qlw
slv~~CE~~g~~CE~~ydnxw~~CE~~qlhw nr unhsdlqhw slqylv|ghq vl vxxdxxghq ydnxwv
~~CE~~ sosl~~CE~~q, hgh~~CE~~lv~~CE~~q nxxndxghq dndq

71 y~~CE~~lv~~CE~~CE~~CE~~ ndvl nxydn~~CE~~ssxw~~CE~~ v~~CE~~duwd/ mndd uj kp ~~CE~~ p lh~~CE~~nv~~CE~~lv~~CE~~h~~CE~~q~~CE~~
kodydqqr w~~CE~~vl hq~~CE~~xwlv~~CE~~h~~CE~~q d~~CE~~lv~~CE~~kv~~CE~~CE~~CE~~ v~~CE~~h~~CE~~lv~~CE~~CE~~CE~~s~~CE~~CE~~CE~~ slvxghq p xxv~~CE~~nvhw
yllnr q dndq hvp 1nxydq d~~CE~~x~~CE~~1

VXWXX OVXvlp xnv~~CE~~lv~~CE~~q rd w lp lq~~CE~~lv~~CE~~q xnr qdr sslp lqhq

Rkr h l w l rd d q n n h r 6 E

Vkx d h q q r s h x g h q rd v x x q q d q d y l r l q v l =

Vkx d h q v x x q q d a l v l n r l v n e d q v x x q v d / m v d v x x d s x k d a d d 1 V k x d s x k d a d d v l v n j v h l v h w 6 E
l q d q v x x q q d w l k o y d l w n d n r k v l H v n 6 E x d s x k d a d d h v n 6 E v e r d 6 E v l v x d 6 E q h w 6 E
o x q d l w x x d o x q d d w l r q h 1 L q d q v x x q q d w y r l w v d n d w d n r p s d l w d / J S v 6 E l w h w d v d
r p d q s x k h d p h m J r r j d n P d s l w d / n x q d h v y r l w l n d q q l q 1 J r r j d n P d s l w d v n d q q l w d
6 E v n y 6 E y l x k n d r v r l w d / p l k l q v x x q v d q r d w n 6 E v l q l v l

M l v v x x d r q k j y l q k h n n r d / v d n n d d n s x l g h q o l y x n v d / k h l v 6 E q d d q m v d h q n h y l w 6 E h m p 1
d h k l 6 E r d n d w r q l l g h q d q v r u d d v d s l g 6 E s l w 6 E a j d q s 6 E n 6 E u r l n n x p d w d q l l q / h w 6 E q 6 E w
v h q v d s x p l v h q v x x d h q p x n d d q 1

Vkx d v x x g h q d y l r l q v l = [k w s v = 2 2 l q d l h v h q a l w r v 1 2 v x x d w](#)

S l g l v | | g h q d y l r l q v l = [k w s v = 2 2 l q d l h v h q a l w r v 1 2 s l g l v | | v](#)

K o y d l q w v x x u h g h q a v d p l q h q = [k w s v = 2 2 l q d l h v h q a l w r v 1 2 k o y d l q w r h q a v d v & \\$](#)

Q h x y r r d k o y d l q w v x x u h l l q = [k w s v = 2 2 l q d l h v h q a l w r v 1 2 q h x y r r d k o y d l q w v x x u h l l q](#)

H x u r s d q v 6 E d u w l = [k w s v = 2 2 l q d l h v h q a l w r v 1 2 h x u r s d q v d d h d u w l](#)

Q l v 6 E n h p l w d / L q d d l h v h q a l w r v =

N x l q n d v 6 E q q x w l n v | q y | B [k w s v = 2 2 l q d l h v h q a l w r v 1 2 v d d h q q x w l n](#)

V 6 E d a l w h q q x w l n h q d s x q d [k w s v = 2 2 l q d l h v h q a l w r v 1 2 v d d p d a l w h q q x w l n h q d s x q d](#)

V k q q h v n u p l w 0 | p p 6 E 6 E 6 E h g r v x v

[k w s v = 2 2 l q d l h v h q a l w r v 1 2 v x q q h 0 n u p l w 0 | p p d u d 0 d d l h g r v x v](#)

P r a g m a t i c s

Pragmatics

P Žo

Vxghudqgh2hnyh q i Žulqivnuh kxudv r vi Čhqv dñvħd v l o w ž g n d q e h n u y d v p h g k r o s
dy p Čedud hj hqyndshu sduh h w d u v ž r p v r p shud x u / x i w u f n / q h g h u e o g / y l q g w / u n d
r f k y l q g u n v l q j v d p w r o v Č e h w x v e u g q l q j g h w y l o v Č e d p r o l j k h v V x g h u d q g h 2 h n y h q
j h v p o d j k h w d w u d x s s v l q r e v h u y d r q v i o e p Ž d r f k d w g r n x p h q v u d g h i o e Č i g u l q j d u
l y Č h u d n h q v r p v n h u l v n r o q v q Č e p l o n e o s h u v l g 1 V x g h u d q g h 2 h n y h q o e v i j s ž y l d r f k
i o e n o d v d e d q r f k d w u h r q h u d n u l q j r u d h r f k y h u n d q 1 V x g h u d q g h q s ž j | p q d M h q y Ž
i Ž u q h q w o e d d w i u d p w o e d w d w l n l q i r u p d l r q l i r u p d y v e h o h u r f k g l d u d 1

Dñvylvñv q v p Ž x s s i | o n o h h q d j w J u x q g h u d i o e o e s o d q h q i o e g h q j u x q g o e d q g h
x v e l o q l q j h q 5347=

Dñvylvñv q w o g h u i o e d q g h p Ž o l j h r j u d i l i o e Ž u n x u : 0<1
P ; / P < r f k P 43

Dñvylvñv q w o g h u i o e d q g h p Ž o l i | v n i o e Ž u n x u : 0<1
P : / P < r f k P 44

Dñvylvñv q w o g h u n r p s h u q v h u d i o e Ž u n x u : 0<
N5 r f k N7

Dñvylvñv q v p Ž x s s i | o n o h h q d j w J u x q g h u d i o e j | p q d M h w o e s o d q 5348 =

Dñvylvñv q w o g h u i o e d q g h p Ž o i o e x q g h u y l v l q j h q l j h r j u d i l j | p q d M h w o e s o d q =
à l o e w ž w o n d / v o e s d r f k e h g o e d j h r j u d i l n n x q v n d s r f k d a y Č e g d j h r p h g l d
p Ž j j v l g l j w i o e d w o e d / d q d v h u d r f k s u h q v u d l q i r u p d l r q 1
à N x q q d r e v h u y h u d y d g d v p l o o h u r f k e h n u y d u j l r q d o l i h q r p h q r f k w u x n x u h u
v d p w h j l r q d y Č e h y h u n d l q d u h q r f k l p Č e v n d j y h u n v d k h v
à N x u l q q h k Ž o h l J H5 G h q e d Ž s o d q h u q g o e f h q u d o v l q q h k Ž o l q n o x g h u d n x q v n d s
r p d v r v i Č h q v w u x n x u r f k y l q g d u d / u j q / k o d y y d w e h w u e h o h v d p w y Č e h u
r f k y Č e h u s u r j q r v h u l

W X W X O V X v n l p x n v h o d q h q r d w l p l q q d o d q h q x o r q d r s s l p l q h q

Dnlylvlnq wæghuæd qgh p Žoiæ xqghuylvqlqj hq l i | vln l j | p qdvlhw ær sæq=

à Nxqqd sæghud rfk j hqr p iæd h{ shulp hqvlwæ xqghuæqlqj dul vdp dæhvn p hg dægd1

à Ehkdæqæ/ wæd rfk suhvqvlw xqghuæqlqj vuhxæw vdp wehgæp d ghp rfk khæd xqghuæqlqj vsur fhwhq1

à Nxqqd wæd xss/ wæd rfk ehgæp d r dnd p r ghæu rfk dæy ægd ghp iæd wæhvnulyd ihqr p hq rfk j æd iæxw æghu1

à I æw Ž kxu qdæxuyhvlnqvndsj nxqvndsj eljjv xss j hqr p h{ shulp hqvlwæy hunvdp khw rfk p r ghæu vrp wæd xss p hg kræd dy uhxæwlnq dy h{ shulp hqvlwæ -nxup Žoiæ l \ 4 l | vlnhq vrp qdæxuyhvlnqvndsj,1

à Nxqqd sæghud rfk j hqr p iæd hqnd qdæxuyhvlnqvndsj d iævæ -nxup Žoiæ l \ 4 l | vlnhq vrp qdæxuyhvlnqvndsj,1

J hqr p iæd qgh

Dnlylvlnq unvdu vj wæ Žunxuhud : 0 < l ghq j uxqgdæ dægh xvelæqlqj hq vdp wlvæ j | p qdvlhw iæwæ Žunxu1 Dnlylvlnq ndq xviædv æ qhmqlvj uhudw j hr j udl rfk i | vln1 Hq gho dy dnlylvlnq ndq æghq dæy ægdv l gh ægh næwuhud l ghq j uxqgdæ dægh xvelæqlqj hq1 Ghwæ j æhu vsf l hævlghqvl l huj hq dy p r æ p hg kræd dy p r ænr uwr fk p æqlqj hq dy æi wæp shudæxuhq rfk uhj qp ægh ghq1

Dnlylvlnq ndq xviædv xqghu ylæhæ vlg sŽ Žhw vrp khæw Revhuydæ r qhuqd rfk p æqlqj dæd j æv khæw xssuhsdgh j Žaj hu xqghu qŽ ud yhf nr w vlg iæd dw vdp æ lq wæ ændj w p hg gæd1 Ghwæ j hu wæghudægh2 hdyhæ lqvlnw l dw æ yhvlnqvndsj nu æhu æjæj vlnvj wæhvn1 P æqlqj dæd j æv khæw wyŽ j Žaj hu shu gæ / hq j Žaj sŽ p r j r qhq rfk hq j Žaj sŽ hiwup lggæ hq/ khæwsŽ vdp p d sæw rfk vlg sxqrnl iæ p æqlqj dæd rfk r evhuydæ r qhuqd nu æv f d153 p lqvlwushuj Žaj1

Dnlylvlnq ndq j ædv lqglylgxæw l sdu hæu l j uxss1 P æqlqj dæd rfk r evhuydæ r qhuqd j æv xw p kxv p hgæ gr npx hqvlwæ r qhq rfk dæd vhw nu æhu wæj Žaj wæ gæw u r fk j æv æævlqr p kxv1 R p vnr æd lqvln kdu wæj Žaj wæ p æqwxp hqwndæ xss j livlnq ægh j ædv khæp hg kræd dy ghq lqir up dæ r q vrp ilqqv wæj ægh d j sŽ lqvlnq hvln ændu qhgæ1

Pævludor f k xæwæqlqj

41 Y æhuwæ r q p hg æd i xqnr qhu lqnxghudgh Ò vln{ 1 SDVSR UW z l udnw z hækhv vhw r u p hg ylæhæ p dæ ndq p æd ylgækwæj khw r fk ælvæqlqj / æi wæ f n/ i xnvj khw vrp shudæx u æw XY ægh{ 1 Dæj hu æghq nr r u lqædvnuqd æ SV,1

Dæhædæwæ

Ædæp hæu Ò ilqqv dæwæggd qhu vrp æss sŽ vlnir qhq ævln{ 1 Eædæp hæu)

Dæp hæu/ Sk| vlv v W r ær{ Vhw r u Vxlv/ i xæj hud lqvln sŽ ædv p dæwævlnir qhu

OXw p kxwup r p hæu

OY lqgp ægh

51 Qhghæægv ægh

61 Gæwup hg Vsdnyxh sur j æp yæd l i æp dæ dæy æghur ydæ q æ qgd y æhuwæ r q

Dn wylwhw

Vxghudqgh2hdyhq yŌhu hq sŏw l vnr ŏqv qŌp lŏegŌr evhuydMr qhuqd -p r ŏlj khwrfk ylgulnŏlqj , rfk p Ōŏlqj duqd -wlp shudxu/ ŏi wŏl fn/ ylgqkdwlj khwrfk qhghueŏg, j ŏv xqghugh nr p p dqgh yhf nr uqd1K hq gr nŏp hq vudukxuyŌghw huxwrfk yd l h u d v d p w i ŏ l q l q i r u p d l r q h q d v l q j h q p d q x h ŏ w l q Ź r w n d n l ŏ s u r j u d p -H{f h o h ŏ h u Ō e u h F d d , h ŏ h u g l j l w ŏ w p h g k r ŏ s d y V s d u n y x h 1 G h w Ō Ō ŏ v n y Ō Ō ŏ w w x g h u d q g h 2 h d y h q r f k k h q v n ŏ l v n d p u d l h u y Ō Ō h u r d n d s ŏ l w h u y d g j Ō Ō h u ŏ s s h q k h w r f k k ŏ g 1 R p v n r ŏ q v h q d u p Ō Ō q w x p h q w i ŏ v n p s h u d x u 0 r f k ŏ i w ŏ l f n p Ō Ō l q j v d p w i ŏ y l g u l n ŏ l q j r f k k d w l j k h w n d q g h w d g d d y Ō Ō i ŏ Ź e d d 1

PŌŏlqj durfk	z z z Ź l q g l f r p
r evhuydMr qhu=	k w s v=22 z z z Ź r u g l f z h d k h u t q h v 2 d i n h q q h Ź s k s B y
OP r ŏlj khw	
OWlp shudxu	k w s v=22 y l Ź d l l h h q ŏ l w r v l 12 r evhuydMr qŌwŏlMr qhu
OOŏi wŏl fn	
OYlgqkdwlj khw	K d y 0 r f k n x w y Ō Ō h u = k w s v=22 x u Ź 1 1 2 4 p f u
OYlgulnŏlqj	
OQhghueŏg	Q r u g 0 h x u r s d y Ō Ō h u = k w s v=22 x u Ź 1 1 2 4 p f v

P r ŏ l j k h w r f k h u p r ŏ p Ō Ō g d a j h v l k x u p Ź ŏ j d Ź w r q g h ŏ d y k l p d n q v r p Ō Ō v Ō e n w d y p r ŏ g -M P K L 534 < f / g, 1 H q k h v n q e h q Ō Ō q v r n ŏ l r f k 32; d a j h u p r ŏ j u d w r f k ; 2; k h ŏ p x ŏ d w l V h h { h p s h ŏ s Ź l q g h ŏ l q j d y p r ŏ p Ō Ō j g l r n ŏ l = k w s v=22 x u Ź 1 1 2 4 p f w

Wlp shudxu= l ŏ e d w i Ź Ź h q k h u d j d p Ō Ō l q j d u v r p p ŏ ŏ j w p Ō Ō h u p d q w l p s h u d x u h q s Ź h q ŏ s s h q s ŏ q s ŏ l w g Ō Ō p d u n h q Ō Ō v Ō e n w p h g j Ō Ō r f k s Ź h q k ŏ g d y 4/8 Ō p ŏ y h u p d u n h q -M P K L 534 < h, 1 Wlp shudxu h q s Ź y h u n d y p d u n l w ŏ q v h j h q v n d s h u l H { h p s h g l v y l g v r d j w y Ō Ō h u n d q w l p s h u d x u h q ŏ y h u v r w v d q p d u n y o d l k ŏ Ź u h Ō Ō ŏ y h u i x n w l j r f k j Ō Ō e h y x { h q p d u n l w l Wlp shudxu h q s Ź y h u n d r f n v Ź d y r p p d u n h q ŏ v u n u d l j w h ŏ u r p g h w i l q q v k x v h ŏ h u w Ō Ō l q Ō Ō k h v n q 1 V n l ŏ d g h u q d n d q g h p r q w h u d j h q r p d w ŏ Ź d w x g h u d q g h 2 h d y h q y Ō Ō d r d n d p Ō Ō ŏ l w h u r f k r Ō Ō i ŏ e d u h x ŏ d w l q 1

Oŏi wŏl fn= R evhuydMr p ŏ i wŏl fn h w l j h u h ŏ h u v n q n h u p h ŏ d q g h y Ź p Ō Ō ŏ i Ō Ō n d x q g h u h q r f k v d p p d g d j -M P K L 534 < j , 1

Rp qhghueŏg nr p p h u v r p u j q Ō Ō g h w e d d d w d y Ō Ō d h j q p Ō Ō h q p h q r p e h k Ź ŏ l h q Ō Ō i l ŏ g p h g v ŏ e v e h k Ź ŏ l h q l q r f k v ŏ e i Ź v p Ō Ō l l q q d v ŏ d d y Ō Ō l q j h q v n h u -M P K L 534 < d / e, 1 P Ō Ō q k h v n q Ō Ō p p 1 P Ō Ō ŏ e x w h u r u n d g h d y y l q g h q Ō Ō g h q w ŏ e v d i h ŏ Ō Ō d r f k g h w d n d q p l q l p h u d j h q r p d w w Ō Ō p Ō Ō h q q Ō Ō p d u n l w l / p h q g Ź i l q q v Ź l h u g h q u l n h q d w d q g u d r e r h m w k d p q d u l p Ō Ō h q 1 D y w Ź g h w i Ź Ź u j q p Ō Ō h q w ŏ r d n d k l a g h u r f k i ŏ e p Ź ŏ -k x v / w Ō Ō p 1 d , ŏ ŏ e y o d d p l q w w y Ź j Ź ŏ j h u r e r h m w k ŏ g 1 Q h g h u e ŏ g p Ō Ō j g h q

Wx WXx Ovx wlp xnvhŏdghq rd w lp lqgdŏghq xŏr qdr ss lp lqhq

daj hv hqđj wp ~~Q~~hnyhqvha/ vñ{ p p xqghu 9 vlp p du hñu p p xqghu 57 vlp p du l i dø p ~~Q~~laj hq j øv edul hq j Žqj gđ dj hq1

Ylagkdwlj khñq= Ylagkdwlj khñq p ~~Q~~ l p 2v r f k p dđ daj hup hghy l qghq +VP KL 534< i, 1 P hghy l qghq ~~Q~~ p hghy ~~Q~~ghw dy ylagghq xqghu 43 p l q x vñu l Hq ylaggp ~~Q~~ñh/ hñu dñhp r p hñu/ eoe hqđj wi øehñu l i vñud s ø f h u d s Ž vñr p hñu w koeg øghu hq vñu/ vñ l l qj d w ø d qgh r erñw er ugh i Ž i l q q d v l q ~~Q~~khñq/ vñr p vñ{ 1 kxv hñu yñj h vñl r q1 Ghwd eoe ehñvñv q ~~Q~~ p ~~Q~~ñwñq y ~~Q~~ñ x vñ l R i vñ l s ø f h u d p ~~Q~~ñ wñp hq vñw s Ž hq p d vñ l i d ø g h w l q vñ i l q q v hq p d wñ d q ylagkdwlj khñq p ~~Q~~ñ i Ź q f d 15 p hñu w koeg1

daj hv p hg y ~~Q~~hñwñf n> vñghu/ vñ gy ~~Q~~ñ/ vñ gr wñ q r uñ q r ugy ~~Q~~ñ/ q r ugr wñ øvñu hñu y ~~Q~~ñu l

Uñxvññq ùhgr y l v d u w x g h u d q g h 2 hñy hq l i r u p dy hq vñu l i vñj d ùss r u w p h g i r n x v s Ž k x u y ~~Q~~ñu r f k p r ø q x yñ f n ø vñ x q g h u r e vñ u y dñ r q h u d v ð w i x q g h u d u s Ž r u dñ h u d vñ ioe ~~Q~~ñ g l q j d u dñ l K h q r ð ioe r f n v Ž k x u p ~~Q~~ñ l q j d u dñ øghu hq wñ ~~Q~~ñ p h u p h g gh øñ dñl y ~~Q~~ñ u s r j q r vñ u d r f k r i i l f l hñ p ~~Q~~ñ l q j d u ioe gh wñ j q d x q g h u ø q l q j vñr p Ź gh w x q g h u vñp p d vñ g vñ h u r g 1 Ghwd j Ž d w i l q q d s Ž e dñ l i p l i l / k w s v = 22 vñ l q dñ hñq q dñ vñ l 12 p r ø q 0 r f k 0 q h g h u e r u g vñr p u d g h q r f k | uñr 1 P ~~Q~~ñ x vññq ioe vñ l q l n dñ l ø s u r j u ð -H { f h o hñu ~~Q~~ñ u h F dñ, hqđj wp r g hñq q h g d q vñ hñ{ f h o dñ l ø d g l e l ø j r u l v o x vñ w d y x s s j l i vñu, 1

H i vñu h w d q vñ r e vñ u y dñ r q h u vñ d w x g h u d q g h 2 hñy hq vñp p d q wñ d hq y ~~Q~~ñ u s r j q r v ioe gh ioe d q g h n r p p d q g h 45 vñp p d u dñ j h q r p d w x vñ l wñ d vñ q dñ hñ q d p ~~Q~~ñ dñ l H i vñu Ž wñ ~~Q~~ñ ioe khq vñ q s u r j q r vñp h g k x u y ~~Q~~ñ u wñ y h u dñ k hñq e dñ y 1 Ghq vñu l i vñj d ùss r uññq vñ d l q n ø g h u d ioe x vñr p y ~~Q~~ñ u s r j q r vñq hq p r vñ yñ l q j p h g vñr uññvññ e dñ j u x q g g 1 y 1 l k x u r e vñ u y dñ r q h u d r f k p ~~Q~~ñ dñ d q y ~~Q~~ñ wñ ioe d w ioe x w s Ž g h wñ r p p d q g h y ~~Q~~ñ u wñ l j | p q dñ wñu vñ dñ ~~Q~~ñ q i u ð wñ d g l ø j u ð ioe d w s uññvññvññ d p ~~Q~~ñ x vññq1

Hñ wñ x s s j l i vñu

L gñ wñ l i l q j dy p r ø qñ s h u = V x g h u d q g h 2 hñy hq vñ dñ x q g h u hq yñ f n dñ vñ g j ø e d g dñ j d p r ø q r e vñ u y dñ r q h u l Ghwd n dñ j ø e dñ d qñ l q j hq x q g h u vññr ø l g hñu x q g h u i u vñ g l l ioe d wñ l g h q vñ l i h u d p r ø q hq n dñ hñy hq d q y ~~Q~~ñ dñ vñj dy ioe d q g h ~~Q~~ñ dñ u =

k w s v = 22 x u dñ 1 124 p f y

k w s v = 22 f ø x g dñ vñ l z p r 1 q vñ k r p hñk vñ ð

k w s v = 22 f ø x g dñ vñ l z p r 1 q vñ f r p s ð r g hñ q h u 0 vñ r 0 p dñ hñk vñ ð

k w s v = 22 f ø x g dñ vñ l z p r 1 q vñ vñ dñ f k 0 p dñ hñj dñññ 1 k vñ ð

[illegible]

Elag 4100p lghudgh elag nr uws Ž p r a w s h u + V h Elag d51,

Ndq pdq ddyCfcd oxiwufnfhwicē dwdqjh kōqgh qghu kōlyhB Vxghudqgh2hdyhq rCē i oē kxu
 oxiwufnfhwydluhudup hōdq sōdwhvr p djj husŽr dnd kōqgh qghu kōlyhV Vxghudqgh2hdyhq
 ndq lidōvnr σ p ŹghwCē thōlywsōdwi oēvōj wlv xwioēd oēqlqj hq l hwkōp kxv p hg klw
 rfk xssvndw d kxup | fnhwxiwufnfhwydluhudi oēydrh kōqgh oēCēg lqj sŽ; p hml
 Vxghudqgh2hdyhq i Žuvhgdq xssvndw d kxukōp wōghukdyhwvr σ p Źghwdj j huj hqr p dw
 rCē i oēd oxiwufnfhwyg kōlyhwp hg p Cēhvxōdwi Źq vnr q Žghq1 Ghwdv hōd oxiwufnfhw
 ylg kōlyhwvr qvr oduv i Źq ip l l l l Oxiwufnfhwvxqnhup hg kōqgh rfk hq vxp thj hōCē dw
 oxiwufnfhw dyvdu p hg xqj hiCē 4 kSd i oē ydu Žwqgh p hml +P KL 534< j,1
 VdāgdūyCēghwi oē oxiwufnfhwyg kōlyv vōqv qlyŽCē 4346/58 kSd1

Vh honylqvwknw ghul Elod d 41

WVX WVX OVX vnlp xnvhdqhq rd wlp lqqdqbhq xør qdr sslp lqh

NÖu

VP KL/ Vyhulj hv p hvr ur σ j lvnd r f k kl gur σ j lvnd lqwlxwvl Lqir up dlr qhq kQf vlg 63'6'534<1
d, kwsv=22z z z 1p kl1h2nxqvndsvedqnhq2p hvr ur σ j l2kxuð dw0qghuer ug04'96:
e, kwsv=22z z z 1p kl1h2nxqvndsvedqnhq2p hvr ur σ j l2kxuð dw0qr gms04'6: 5<4
f, kwsv=22z z z 1p kl1h2nxqvndsvedqnhq2p hvr ur σ j l2kxuð dwQp r ælj khv04'8483
g, kwsv=22z z z 1p kl1h2nxqvndsvedqnhq2p r ælj khv0 f kQp r æp daj g04'4847
h, kwsv=22z z z 1p kl1h2nxqvndsvedqnhq2p hvr ur σ j l2kxuð dw0xi wlp shudxu04'6: 6<
i, kwsv=22z z z 1p kl1h2nxqvndsvedqnhq2p hvr ur σ j l2kxuð dw0ylqg04'8<57
j, kwsv=22z z z 1p kl1h2nxqvndsvedqnhq2kxuð dw0xi wlf n04'66: 63

Xvelæqlqj wyluhæq 53481J uxqghuqd i æj | p qdmlhw ær sæq 53481I æhnulivhur f k dylvqlqj du
53487; 1kws=22z z z 1 sk1l2gr z qæ dg24: 7; 86bj uxqghuqdbi r ubj | p qdmlhwæur sæqb5348'6gi

Xvelæqlqj wyluhæq 53471J uxqghuqd i æ ær sæqhq i æ ghq j uxqgæj dægh xvelæqlqj hq 53471
I æhnulivhur f k dylvqlqj du5347<91
kwsv=22z z z 1 sk1l2gr z qæ dg2499767bj uxqghuqdbi r wæur sæqhqbyhunnr mædvx'6gi

Elæj r u

I ææj sŽhq h{f hæhæi ælqi ædæghwæ yQhur evhuydlr qhuqd æQn qhgæq,
kwsv=22xuð1124p f z æQn/ H{f hæhæi1

Elæj d41Hdylqwxnmlr q1

Elæj d511P r ænr w1

Mhvlf d Eur dv r f k Fdp lœd M kdqvr q

Hhylvwknlr q

P r œ 0 r f k y œ ħ u r e v h u y d w r q h u l g l q q œ Ÿ p l œ œ

P Žo

Gx i Žu l q v n h u l k x u d v r i œ ħ q d h w h œ v l œ w Ž ħ g n d q e h m u y d v p h g k r œ s d y p œ œ d d h j h q v n d s h u s œ d œ p h w d u v Ž v r p v l œ p s h u d x u / œ i w u l f n / q h g h u e œ g r f k y l q g w / u n d / p h q r f n v Ž p h g k r œ s d y y l q g u n v œ l q j r f k p r œ v œ ħ w x v e h g l q j p r œ l j k h w l G x j h v p œ d j k h w d w w œ œ d x s s g l q r e v h u y d m r q v i œ p Ž d r f k d w g r n x p h q v n u d g h y œ ħ u d n i œ œ œ g l q j d u v r p v n h u l v n r œ q v q œ Ÿ p l œ œ œ ħ u v l g 1 G x œ œ g l j d w s Ž y l v d r f k i œ œ œ d v œ p e d a g r f k d w t h v r q h u d n u l q j r u d h r f k y h u n d q 1 G x i Ž u j u x q g œ œ d a g h n x q v n d s h u l k x u y œ ħ u s u r j q r v h u j œ œ 1 S Ž j | p q d M h q l y Ž i Ž u g x œ ħ q w œ œ d g l j d w i u p w œ œ d w œ œ w l n l q i r u p d m r q l i r u p d y v œ h œ h u r f k g l d j u p 1

Xw œ ħ u l q j

V h u l i v œ j u d s s r u w

N œ p u œ v r f k v œ œ y x w œ ħ u l q j h i v n u l q œ œ q d g u d s s r u w

V l g

X s s j l i v œ q x v i œ œ g x x q ħ u p l q w w h g œ j d u x q ħ u q Ž u d y h f n r u w v l g / j œ œ d h q j Ž a j s Ž p r j r q h q r f k h q j Ž a j s Ž h i v n u p l g g œ j h q / s Ž v œ p d s œ w r f k n œ f n v œ j y d u r h g œ j 1 l œ œ p œ œ l q j d u q d r f k r e v h u y d m r q h u q d e h k œ s h u g x u œ œ d p h g f d 1 5 3 p l q x v n u s h u j Ž a j 1

P œ h u l d œ

G x e h k œ s h u k d v œ j Ž a j v l œ i œ œ d a g h p d m u l d œ

41 Y œ ħ u w œ m r q p h g d œ d i x q n v r q h u l q n œ x ħ u d g h Ò v h { 1 S D V S R U W z l u h d w z h œ k h u v h q v r u v r p p œ ħ u y l q g k d w l j k h w r f k Œ n v œ l q j / œ i w u l f n / i x n v l j k h w v l œ p s h u d x u / œ œ v / X Y 0 l q ħ { 1 D a j h u œ ħ q n r r u g l q d m u q d œ S V ,

51 Q h g h u e œ g v p œ œ h

61 G œ v u p h g V s d u n y x h s u r j u p y d u l i d œ g x d œ y œ ħ ħ u r y d a q œ œ q d y œ ħ u w œ m r q 1

L i d œ r y d a q œ œ q d y œ ħ u w œ m r q l q v i l q q v v œ j œ œ j d j n d q g x h u œ œ d g h q p h g i œ œ d a g h =

d, E d u r p h v n u Ò i l q q v d w œ g g d q h u v r p œ s s œ n d m r q s Ž v n d i r q h q - E d u r p h v n u) D œ l p h v n u / S k | v l f v W r œ œ { V h q v r u V x l v n / i x q j h u d u l q v n s Ž d œ v p d u v n d i r q h u v j y œ œ

e, X w p k x w n u p r p h v n u

f, Y l q g p œ œ h

W X W X O V X v n l p x n v h œ d q h q r d w l p l q q d œ q h q x œ r q d r s s l p l q h q

J hqr p iødqgh=

à Gx yOñu hq sòw l vnr øqv qOþ l øøgOþ g xwøø døl glqd r evhuydlr qhur f k p Oñlqj du xqghugh nr p p dgh yhf nr uqd l Y Oñu hq sòw vr p lqj hq dæqdg ydøw dg j Oñu øsshqkhwr f k køøg1

à Gx iøelq glqd p Oñhxøw l qž r wndøl øsur j uð vøøh{hp shoH{f hohøhu Oñu Fdø1 R p gx døy Oñghu SDVSR UW vñqv r thu p hg Vsdnyxhsur j uð p hw øj uð p Oñhxøw l q glj l vøøt1

à Rp vnr øq vñqdu p Oñqwxp hqw iøø vñp shuøxu0 r f k øi w l f n p Oñlqj vð w iøø ylgguñw l qj r f k kðw l j khw ndq gx dy Oñd ghwd gðv d i Ź q ed d l

z z z Ź l qgl f r p /

kws v=22 z z Ź r ugl f z hðk h u t q h v 2 d l n h q q h t s k s B y /

kws v=22 v y l q d l h v h q ø d w v l l 2 r evhuydlr q O w d l r q h u /

K d y 0 r f k n x w y Oñu = kws v=22 x u d 1 l 24 p f u

Q r u g 0 h x r s d y Oñu = kws v=22 x u d 1 l 24 p f v

I øødqgh p Oñlqj dur f k r evhuydlr qhur vnd gx xwøø=

à P r øl j khw

à Wñp shuøxu

à Oxi w l f n

à Ylggkðw l j khw

à Ylgguñw l qj

à Qhghueøøg

Qhgdq i Ź Ź gx krøø p hg ydg gx vnd øh d v l ylg p Oñlqj d u q d r f k r evhuydlr q h u q d

P r øl j khw høhu p r øp Oñj g daj hv l kxup Ź j d Ź w r qghødu dy kl p dñq vr p Oñv Oñw dy p r øl Hqkhvñq øhq Oñ qvr n v r f k 32; daj hup r øj d w r f k ; 2; khøp xðw l

Vñ Wñhøø4 l Z lñshgld i øøv r øl qj dy r n v l

+kws v=22 v y Ź lñshgld t j 2 z lñl 2 P r øp Oñj g, 1

Wñp shuøxu= l øø d w i Ź hq v Ź hq khw l d p Oñlqj d u r p p øøj w p Oñu gx vñp shuøxu hq s Ź hq v Ź øsshq sòq sòw vr p p øøj w g Oñ p dñh q Oñv Oñw p hg j u d l Gx j øø p Oñlqj hq s Ź hq køøg dy 4/8 Oñ p øøhu p dñh q1 Wñp shuøxu hq s Ź hñd v dy p dñl w d qv hj hq vnd shu l H{hp shølv ylg vr d j wy Oñhu ndq vñp shuøxu hq øøhu w w v d q p dñ y d d k øø h Oñ øøhu i xñw l r f k j u d h y x{ h q p dñl w l Wñp shuøxu hq s Ź hñd v r f n v Ź dy r p p dñh q øv d u n d i v j w h ø h u r p g h w l q q v k x v h ø h u w Oñ l q Oñk h v h q 1 Vñ l ø d g h u q d n d q g h p r q w h u d p h g d w y Oñ d r n d p Oñ sòw h u r f k r p i øø d h x ø w l q 1

Oxi w l f n= R evhuyhud r p øi w l f n h w w l j h u h ø h u v n x q n h u p h ø d q g h y Ź p Oñv i Oñh q d x q g h u h q r f k vð p d g d 1

Rp qhgueaghr p p hvr p uhj q Cēghwedud dwdy Cēd uhj qp Cēd hq p hq r p ehk Žēd hq Cē
il aq p hg vqce w lq ehk Žēd hq rfk āw vqce vp Cēd lq qd q v Cēd dy Cēlqaj hq vnhul
P Cēlqkhv hq Cē p p 1 P Cēoexw h r uwdgh dy y lqghq Cē ghq wcewd i hō Cēb/ rfk ghwd
ndq p lqlp hvd p hg dww Cēd p Cēd hq q Cēd p dnl v Cēd/ p hq g Ž i l q q v ghwlvn i o e d w d q g u d
r e r m w k d p q d u l p Cēd hq 1 D y w Ž a g h w i ū Ž q u h j q p Cēd hq v l o r d n d k l q g h u r f k i o e h p Ž o - k x v /
w Cē p p , e o e y d d p l q w w y Ž j Ž a j h u r e r m v w k o e g 1 Q h g h u e o e g p Cē j g h q d a j h u g x h q d j w
p Cē u h n y h q v h q / v l o h { h p s h o p p x q g h u v h { v l p p d u h o h u p p x q g h u 5 7 v l p p d u l i d o
p Cē l q a j h q j o e v e d u d h q j Ž a j g d j h q 1

Y l q g k d w j k h v h q = Y l q g k d w j k h v h q p Cē v l p 2 v r f k d a j h v r p p h g h y l q g h q 1 P h g h y l q g h q Cē
p h g h y Cē g h w d y y l q g h q x q g h u v r p l q x v h u l H q y l q g p Cē d h / h o h u d a h p r p h v h u / e o e h q d j w
i o e h m u l i v h u q d s o f h u d v s Ž v l r p h v h u k o e g o y h u h q v Cē v l v l l a j d w o e d q g h r e r m w e r u g h
i l q q d v l q Cē k h v h q / v r p v h { 1 k x v h o h u y h j h v l r q 1 G h w d e o e g x e h d h v l q Cē g x y Cē h u x w
p Cē o e w h q 1 R i v d s o f h u d p Cē q w x p h q v w s Ž h q p d w l L i d o g h w l q v i l q q v h q p d w l n d q
y l q g k d w j k h v h q p Cē v i ū Ž q f d l w y Ž p h v h u k o e g 1

Y l q g u n v l q j h q d a j h v p h g y Cē h u w h f n > v o e h u / v l g y Cē v / v l g r w / q r u / q r u g y Cē v / q r u g r w / o e v d j
h o h u y Cē d j 1

U h v x o d w

à G x u h g r y l v d u g l q d u h v x o d w i r u p d y h q u d s s r u w p h g i r n x v s Ž k x u y Cē h u r f k
p r a j x y h f n o d x q g h u r e v h u y d m r q h u d r f k i x q g h u d s Ž y d g g h w l n d q e h u r u s Ž 1
à G x r f i o e d r f n v Ž k x u p Cē l q a j d u d o y h q w v Cē p h u p h g y Cē h u s u r j q r v h u d i o e
g l w x q g h u o e l q a j v r p ū Ž g h x q g h u d p p d v l g 1
à P Cē v h x o d w l q i o e g x l n d n l s u r j u d - H { f h o h u Cē u h F d o , l h q d j k h w p h g
p r g h o h q q h g d q 1

à J Ž u g x s Ž j | p q d m h w n d g x Cē h q i u d w Cē d g l d u d i o e d w s u h v h q v h u d p Cē v h x o d w 1
à G x v n d v h g d q r f i o e d g l d r e v h u y d m r q h u p h g d h w h o d y Cē h u s u r j q r v h u v o h { h p s h o i ū Ž
i p l l / k w s v = 2 2 v l p d l h v h q d l v r v l 2 p r a q 0 f k q h g h u e r u g v r p u d g h q / | u t r 1

à H i v h u h w d q v o r e v h u y d m r q h u v n d g x j o e d h q h j h q y Cē h u s u r j q r v i o e g h i o e d q g h 4 5
v l p p d u d p h g k r f s d y g l q d h j q d p Cē v h x o d w r f k r e v h u y d m r q h u d 1 N o f i o e d v h g d q g l q
s u r j q r v p h g k x u y Cē h u w x y h f n o d g h v l y h u d j k h v h q x q g h u g h q q d v l g 1 V h u l y h q u d s s r u w s Ž
k x u g x j m u g h g l q y Cē h u s u r j q r v l u d s s r u h q v n d l q n o x g h u d h q p r v y h u l a j p h g v h r u h v n
e d h j u x q g / g l y 1 k x u g x d a y Cē g h g l q d r e v h u y d m r q h u i o e d w i o e x w s Ž g h w n r p p d a g h
y Cē h u v t

W X W X O V X v n l p x n v h o d q h q r d w l p l q q d o d q h q x o r q d r s s l p l q h q

Hf wdxssj livhu
Lghqilhlqj dyp ræwshul

à Gx vndxqghuhq yhf ndv vlg j æd gðj dj d p r ær evhuydlr qhu1 Revhuydlr qhuqd ndq
j ædv dqvlgj hq xqghuvnr ælg hohuxqghui ulvg1l ædwlghqvlil hud p r æhq ndq gx
dqvægd glj dy iædqgh æfndu

kwsv=22z z z 1p kl1h2nxqvndsvedqnhq2p hvr ur æ j l2p r æ0qwr gxnvr q046; 85

kwsv=22f æ xgdælvz p r 1qvækr p hkvæ æ

kwsv=22f æ xgdælvz p r 1qvæf r p scp r ghæqh0æ r 0p d j hvkvæ o

kwsv=22f æ xgdælvz p r 1qvævduf k0p d j hq dæh j kvæ o

à Dæhqdmywndq gx dqvægd glj dy æp lqhudgh elænr unsŽp r ævshuvr p æd hq j hu
glj 1

à Gr nxp hqvud glqd p r æ l elæ æ r w j ud hud, r f k vdp æ elæghud l hwr f k vdp p d
gr nxp hqvŽndq gx l hi vhu kdaq nr qwr æhud glqd r evhuydlr qhur f k æd æd h sŽ
dwlghqvlil hud p r æ j l æp lqvndædvrf nqd gdxp r f k n æ f nvæ j iæ glqd elæhul

à Gx ehkæghuhqgdwdaj hi ædqgh p r ævæhvq=f luvxv/ flur wædvxv/ flur f xp xæv/
dæwædvxv/ dæw f xp xæv/ f xp xæv/ f xp xæ qlp exv/ qlp er wædvxv r f k wædvxv iæ
gh p r æ gx r evhuyhudul

à l xqghud xwsŽylænhwævgx ndq i Žnæqghr p r p dæp r vi æhvæwæžg j hqr p dæw
væghud p r æ1

Ndq p dqvægd æi w l f nhwædwædj h kægh qghukdy hB

Gx vndxssvndwæ kxukæwæghukdy hwnr æ p æžghwædj j huj hqr p dæw æd æi w l f nhwsŽ
vnr æ Žghq r f k r æ iæd ghwp hg ghwæi w l f nhwr p æžghunæwæžylg kdyhwæqæd glj 1 Ghwæ
yægh j Žudwæyæd i æž z z z 1p l1l1 Oxi w l f nhwnæqn hup hg kæghq r f k hq wæp uhj hoædw
æi w l f nhwæyæd hq xqj hi æ4 kSd i æydu Žwægh p hvrul Væqgdugyæghwi ææi w l f nhw
ylg kdyv wæqv qlyŽæ4346/58 kSd1

NOæ u=

z z z æ lqgl f r p

z z z æ r uglf z hdk h u b h w æ d l n h q q h æ s k s B y /

kwsv=22v1p d l h w h q æ l v r v l l 2 r evhuydlr q0wæmr qhu/

kws=22z z z 1p kl1h2ydguhækdy0 f k0xwækdy0 f k0

nxwydg hu æt 2Vw r f nkr æ 259: 6: 63&z v æ swæ/z (53v æ swæ/sur { | æ swæ

d/sdæp hvræ lqg

z z z æ l uqr 2ndwæ&ævæ@971-6476) æ q æ4896976) } r r p æ6) æ j d æ l qg) sur n æ68:

Hf hp shosŽ p r ænr wiædhwylw hq Pr æOr f k yCghur evhuydMr qhul hdyhqv qCp lœœ

Elœ=skr wvir ũ r x i ur p SI{ dœd

Fluxv/ Fl hœui rœp r œ

Kœp d p r œ vr p ydœdj hq ilqqsŽ hq
kœp p hœq 8 r f k 46 np 1SŽgdj hq Cœ
gh r i wylw r f k kduhwylŹlj w
xw h qgh1

Fluxv xqf lq xv i rœp r œ
p h g n r nd ũ 1

kws v=22z z z 1p kl1h2nxqvndsvedqnhq2p hw
hr ur œ j l2p r ænœw ilf h ũ qj 0414838

Elœ=P duf Sœf xœbi ur p SI{ dœd

Flur wœwv/ Fv hœu wœp r œ

Kœp d p r œ sŽ; wœ< np æ kœg1 Eh w Ź ũ
dy vp Ž lnuwœh ũ l P r œ h q Cœ v x q q d r f k
j h q r p vnlœdj d1

kws v=22f r p p r qvŹ lnp h g l d t ũ j 2z 2l qgh{ Ź
ks B x ũ g @5453; 7

Elœ=M" Ur w h nœi ur p SI{ dœd

Flur f x p xœv/ Ff hœu p d h ũ œ p r œ

Pr œ h q dj j hu kœp w/ 8 np hœu kœp ũ h/
r f k iœ h n r p p h ũ l vnlwŹ Gh eh w Ź ũ dy
vp Ž p r œ wœdu xssœdggh h i v h u
y d œ d q g d r f k elœ d u h w y Ź l j vp œ q w h ũ l

kws v=22z z z 1p kl1h2nxqvndsvedqnhq2p hw
hr ur œ j l2p r ænœw ilf h ũ qj 0414838

WXVWX OVXvnlp xnvhœqghq rd w lp lœqdœqghq xœr qdr ss lp lœh q

Elæ=M" Ur wlnoi ur p Sl{æd

Dærf xp xæv hæueæhp r æ
Eæhp r æ OEp hghææp d r i væwxæqd p r æ1
kwsv=22z z z 1p kl1h2nxqvnðsvedqnhq2dærf
xp xæv Oer æhp r æ041649<6

Dæv wædv/ Dv hæuvlnhp r æ
P hghææp d r æ vr p elæduræ æj užd
vlnwsŽ5 væ8 np kæg1P r ælqh
iæer uchduææqhgvlqaj sŽi æj sæq1
kwsv=22z kdæklv æ xg f r p 2f æ xg0
vshv2dæv wædv2

Fxp xæv/ Fx hæu wæf np r æ/ yd f nhæ0
yæhp r æ1
Elædv r i væxqghuyŽur fk vr p p dugŽ
p dnhq yæp v dy vr æq p huæ æ dy æi vnhq1
OŽ d p r æ vr p ilqqv sŽ833 væ4833 p
kæg1
kwsv=22z z z 1p kl1h2nxqvnðsvedqnhq2p hæh
r ur æ j l2p r ænæwli f hulqj 0414838

« l æ d lq1FF E\ 0D 6B

Vædv/ Vhæhuglp p r æ
Glp p r æ æ æž d p r æ ydæv p r æædv
æj j hu æž r qwæqv p hæq p dnhq r fk
hq kæg sŽ5 np 1l æ æq æyæqæj hq j uŽ1
kwsv=22z z z 1p kl1h2nxqvnðsvedqnhq2p hæ
hr ur æ j l2p r ænæwli f hulqj 0414838

Vwdrf xp xoxv/ Vf hduydr r æ

Ož d p r æ v r p w j h u h w e o e h d n w
l q w l f n r f k n d q e l æ d v n l n w v r p
v æ n h u k h æ k l p d q 1 J h u v æ d q
q h g h u e æ g 1

kwsv=22z z z 1p kl1h2nxqvndsvedqnhq2
p h v r u r æ j l 2 p r æ n æ w i l f h u l q j 0414838

Fxp x æ q l p e x v/ F e h æ h u e l p r æ/
Ž n p r æ

E l p r æ n d q j h x s s k r y v æ w æ l u n d
y æ h u h q r p h q 1 R f k i æ h n r p p h u
y d q d j d h s Ž v r p p d h q æ x q g h u d q g u d
Ž w l g h u l N d q w æ e n d v j x s s v æ 43 n p
k æ g 1

kwsv=22z z z 1p kl1h2nxqvndsvedqnhq2
p h v r u r æ j l 2 p r æ n æ w i l f h u l q j 0414838

N æ u=

V P K L/ V y h u j h v p h v r u r æ j l v n d r f k k l g u r æ j l v n d l q w l x v l q i r u p d l r q h q k æ v æ g
59191534<

kwsv=22z z z 1p kl1h2nxqvndsvedqnhq2p h v r u r æ j l 2 p r æ n æ w i l f h u l q j 0414838

kwsv=22f r p p r q v æ l n l p h g l d t j 2 z 2 l q g h f s k s B x u g @ 5453; 7

kwsv=22z z z 1p kl1h2nxqvndsvedqnhq2 d w r f x p x o x v æ r æ p r æ 041649<6

kwsv=22z k d w k l v æ x g f r p 2 f æ x g 0 l s h v 2 d w w d x v 2

E l æ n æ u=

kwsv=22sl{ d æ d f r p 2 s k r w v l q i r u p d l r q h q k æ v æ g 59191534<

f l u x v = k w s v = 22 s l { d æ d f r p 2 y 2 s k r w v 2 f l u x v æ r æ æ d F 6(D 8 æ d h j u x q g k l p p h æ
56<649: 2

f l u r w d x v = k w s v = 22 s l { d æ d f r p 2 y 2 s k r w v 2 v n l f l u r w d x v 0 l q g 044797382

f l u r f x p x o x v = k w s v = 22 s l { d æ d f r p 2 y 2 s k r w v 2 f l u r f x p x o x v f l u x v æ r æ æ d

v r æ h g j (F 6(D 8 æ j 056775; 2

d w r f x p x o x v = k w s v = 22 s l { d æ d f r p 2 y 2 s k r w v 2 d w r f x p x o x v æ r æ æ d 0 l q / F 6(D 7 g h u 0
699; 8<42

VX V W X O V X v n l p x n v h æ q h q r d w l p l q q d æ q h q x æ r q d r s s l p l q h q

VXWVX OVXVnlp xnvhæqhq rd w lp lqqdæqhq xør qdr sslp lqhq

f xp xoxv=kwsv=22sl{ ded f r p 2y2skr wv2i 050p r æ0n| 0mugeuxn0kr ulv qv08668742
wv2i f xp xoxv=kwsv=22sl{ ded f r p 2y2skr wv2p r æ0wv2i f xp xoxv0p r æ0klp p h0
836772

kwsv=22f r p p r qvz lnlp hglđt ŷ 2z lnl2l Lqir up dlr qhq kQF wlg 59'9'534<
d0r wv2i v=kwsv=22f r p p r qvz lnlp hglđt ŷ 2z lnl2l l0=Đ0r wv2i vbxqgxælv1s
wv2i v=kwsv=22f r p p r qvz lnlp hglđt ŷ 2z lnl2l l0=53470860
43b3; b7: b77bVwv2i vbf æ xgvbdqgbylj d0lqbH0r /bQhydgđ1S
qlp er wv2i v=kwsv=22yp 'z lnlshglđt ŷ 2z lnl2l l0=Qlp er wv2i vbylj d1S
f xp xoxv f r qj hwv=
kwsv=22f r p p r qvz lnlp hglđt ŷ 2z lnl2l l0=Fxp xoxv f r qj hwvbf æ xg1s
f xp xø qlp exv=kwsv=22f r p p r qvz lnlp hglđt ŷ 2z lnl2l l0=Fxp xø qlp exv1s

Fhdlyh f r p p r qv 00Fndu=
FF E\ 0D 7B +FFDwlexvlr q0kdlh D0nh 7B Lqvhuqdlr qdb
kwsv=22f uhdlyh f r p p r qvt ŷ 2đf hqvh2e| 0cd27'32ghhg1q
FF E\ 0D 6B +FFDwlexvlr q0kdlh D0nh 6B Xqsr ulg,
kwsv=22f uhdlyh f r p p r qvt ŷ 2đf hqvh2e| 0cd26'32

Vlhp hqwnq dylQF lqhq rd dqqlqudnhqwnlghq dhur g| qdp llnnd

Ookud Sobylolqhq

WDYRLWVHHW

DnlylVhnlq vlyrlVhnlq r q vwxwxd ndylhq dVCEwplVnlhqr lklq1 Slnnddq s|v|ylqCE
hdobQEndylhq r q vE|q|wnhklwCEhulv|VCEnlhqr rd xxvlhq hqgdxhghq vdyxwob lvhq1
Hmp hunlml nhob r -Fkhtgdxp pdxv, dylwCEVhlp hqhqVCExxvlh dchlon p xxukdwlh
dyxob p xxukdvlhwnxohvdydwihp hqhwxvlon sdnr lon rd vdydwsdchm vlhp hqhVCEllqql
r dnydq r dnydq dlycdDnd sur vllqlslwlvhq xonnhq hohdr r p lq1

\ dnlqhq vlhp hqwnq dylQF lVnlhqr r q vxd=vdyhqvceusvCEwplur wlnhdydwihp hqhVCExp hoh
vxdhoh dowlml rd nQF p hnQF sCEwCEVhlp hqhVCEllhqr qd soq qCEp dylwobq1 Mlghqnlq
ndylhq dqqlqlmlyhw/ Ondyr w rd Qkdwxdw r kndydw vlhp hqhVCExxvlon dyxob ndxhp p dv
hp r ndylw1 Yhm r q p|oe vCEhCEVhlp hq|CEdylwQCEhdp hqwl/ mnd nCEwQCE/k|yCEM
hmp hunlml udyvdsdchnr/ dssCEd nxuhq p llnnd1

Xvhdw vlhp hqhVCEw hqVCEw hqVCEw k|oevnlwng dyxob1 P hkyCEhQCEhw khghp CE
kr xnxwlnhdydwCEp lQF|oe CE rd vob dnd khghp CE vlvCE CEVhlp hqhVCEwlnxohwobq
hqvlq hQF hq uxqdxvcevnqdydq CE1 Mvnlq ndylwvwr wdydwvobp dvlid vlyCEwCE
vlnxylid vlhp hq|CEmnd p dnxwdydwCEp hq udmnlwd vlnxvnlwdsvlvlCEq p dnr rd1

ShonCE qhwlnCEq|vnlhq p xxvrv khghp CECE vobvob wlp ld dylQF lVCE hghvkwlycdq
vlnlQCE Hmp hunlml uxlvnrxunxq -Hfedoxp hmlulxp, vlhp hqhVCEw khghp CECE
sxundvxydq qhwlnq p xndqd1 Vlhp hqnr gdq nxlyxp lvhq rd sr nvkwydq dydxwp lvhq
p|oeCEw sdbp lq -lp sdllhv j obgdihud, vlhp hqhVCEwlnr xwydwsvlvlCEp dnr rd rd mlghqnlq
nxuhqsr gylhq -J hddldfch vlhp hqhVCEwlnxvxydwihp hqnr gdwd ndvexolq vlyrlq1

VCECEvlylVhnlwd nhnlv|VCE vxdnq dyxob dylQF hq vlhp hqwnq vlnndwlnxxq1

DnlylVhnlwlnh xvnlw elr o j lq r shvxnvhq vlyrlVhnlw=
V5/ V6/ V7/ W/ V43

Elr o j lq vlyrlVhnlq dylw|VCEwCEvobchhw/ryd#
V4 -elr o j lqhq vxvlp xv, rd V7 -P lVCEw CE qB1

DnlylVhnlwd r q p dgr obwd |kglwCE i|vlndq r sslp CECE vlvCEwlyrlVhnlq V8
-Yxr urydnxv rd dlh,1

VXVWX OVXvmlp xnvhdqhq rd wlp lqgdqhq xon qdr sslp lqhq

WRWHXWAV

Dnlylvhmlq nr kghlj kp QCEr ydw: Q<1 ør ndv V/øvCEyr lgddq | kglwCEelr ø j lðq vlvCEeE i|vlndq dkhðxhvlq rd vxvlp xvp hqhvp llq1 Hmp hunlml qr vlvhCEvñ vr sll dnlvylvhwllq | kglwlvCEv i|vlndq dkhñml1 Sduv wlvxvðdñr kvd r q vlv/ mœ lq vlp hqlCEr q sdukdlnq æghwCEwCEp dñw wñ V/øvCEr sslædwkdndqwxwlydwj kp Q/øv wñddq rd glj lvdwñddq/ vñvCEkdumlvñdydw kdydqqr lqvð/ kdydqwrñq nxydñp lwd rd nludðp lwd1 Dnlylvhmlq nhw r q 506{ 78 p lq1

Dnlylvhmlq hqvlp p CEhq r sslwqv nrr wx dkhq hvwñwCE rd vlp hqvñq hvlp lvhwCEp dñw wñ Rshwñdyr l dñvñ dñwð dkhw vlp hqlq dlvylvCEñ v|p | nvCEñ vlp hqvñq hunhCE

Vlqhq r sslwqv nrr wx vlp hqvñq ðqvñwññq vxvlp lvhw ð lwdðp lqhq/ kdydqqr lqv rd kdydqwrñq nludðp lqhq, rd p dñq uñhqvðp lvhwñ Or sñvñ yr lgddq | kvñghvñqd nhvñwñ hmp hunlml vlvCE nxlqnd p r qlq ælvñvlq lkp lqhq r q vððxw lghdqvð ør qqr wñ Hmp hunlml 4: 330xyxq dñwð p xxdq haj ævñdñq lqvqœel/ J hr y h Fdñ/ vñdwñð ðqqlqvlyhðwñq vlp hqvñq dlvð rd nhvñ qllgq dyxœ sr vxulq +S| | nñœ 534: ,1 Yxr qqð 4<84 vyhvlvCEhq lqvqœel r lydv vñldvð kdydqqr lp dñ vñkr nñddq nllqqlvvp hñdqv lp lq/ vñdððkðq +S| | nñœ 534: ,1 Or sñvñ yr lgddq sr kvð yr lvñr vlp hqvñq uñhqvñv k| øj| qvCEñ lwdq p lñxylvñvñwñd ælvñwð vñ uñhqvñp lwd1

Dñxñ| v|p | nvCE

\$P lvCEñqr rd ndvñœ r q ðylvCEñhp hqlCEB-R q k| yCEñvñwð p | ø/ hvCE sslædw p xlvñdñxñqnd sœ vlv hur dd vlp hqvñq ðylvCE lvhwCE

\$P lvCE| vñdñvðyr lp ld vlp hqvñq ðylvCE lvhwCEyr l k| øj| qvCEBP lvñq vCE CEqCE| vlp hqvñq uñhqvñhwðB

\$P lvCEñp lCEñdvñw| øj| qvCEñhp hqvñq ðylvCE lvhwCBP lvñq vCE CEqCE| khghp CEvCEñ vlp hqvñwCB

\$P lœvð ndvñrd ðqqlqvñv k| øj| wCEB

\$P lvCE| ø/ CEñqqlqvlyhwCEñ kdyhqvñdyr lv r œ vlp hqvñq ðylvCE lvñq ndqgdvB

\$P lvñq ðqvñvðd dlv| ndvxsñnñddq ðmp 1 ðyr lp hœ qlv/œñdydydñdvlywñuðvñqd p hvCExlq,B

\$P lvñq rd p lvñ hñvñðqqlqvlyhwñ ydw nhklw/qhwhyr øxvñr q dñdqvB

sllwkhvñqndyr/
vññlsdñh/
vxvñvñ/
p lwd/
vñssl/
sxp sxd/
kðp p dlvñxv/
nxxp dñp d/
p xlvñqsdq yCEñhvñ/
hñ æññq vlp hqlCE
ðmp 1yðkvñvð/ ðkp xv/ yr lñxñnd/
nr lyx/ nxxv/ p dlvñr wð d,

NCEq| nCEñdñp hñ/ sdq|

DNWLYLWHHWWL

41Nhu0000 vxvnlw0yld vlhp hqI0EqlIq/ hw0Evdgd0dq uhl0xw/ hul 0rthq rd hul ndyl| nvl00ghq vlhp hqI0EHvp hunl0v nxlq s0l nlu00kghq ndyl| nvl00 vlhp hqI0E Q0E s0E000 yhu0l0p d0q v0p d0 0rthq hul | nvl00ghq vlhp hqvlq hur rd h0 sr sx00lr q vl0Ew0p xxqvl00d vlhp hqhq u0h0qvlhw0/ y0Ew0E p 1-R shw00d r q vrlq k| y0Exr p 0kwd sr kglqvrthq 0 p dwd ndylthq p xr y0vxyxxghw0 ndyx| p s0Ew00 p xnd0q1

51Vkvnlv0dq hul vlhp hqvlq 0qvr u0vr rd1

D, Sxgr vlv0dq vlhp hqI0E0p dwd nr unhxghw0 qllq/ hw0E0Eg0000 0wld0q vlv0dwxq p hunlq0001P l0E0r un0p p d0d sxgr vlv0dq vlhp hqI0Evl0E p l00qnlqvr l0p sl0 vx0 nvl0 v0gd0q1P l0v0dq nxlqnd n00v p hunl0E0p d0 0rthq vlhp hqhwsvr dy0v1Vhk000 xvhlv0 vlwv rd rd 0vnhw0dq nhvnl0yr 0qvr p d0dwd0

Rssl00kxr p d0y0/hw0E0nlg0nlq 0rthq vlhp hqhw0dkhsr p p lq v0Eg00/0p hunlq0001 D00xxq v00vhw0p hqhw0d0y0d0y0d0nxw0 0sduhp p l0v0 p xw0r shw00d r q k| y0E nhvnxw00w0d 0 kp 000l0E0p l00E l0h0w0dq r qnd0q ndylq nd0q00d w lvr vx vx0 v1 Rvxp l0hq v0ndw0p d00q y0 p 0kgr 00p p d0 00rd rd y0kvl00y0 0qvr v00h rd 0yl0E l0hq0B

E, Sxgr vlv0dq vlhp hqI0E0x0w0p hq hvthq rd p l0v0dq vlhp hqvlq vlyxvxxq0dwd 0qvr0E 0p d0d1Vhk000 xvhlv0 vlwv rd rd vx00r l00dq vx0 nvhl0 00vnhw0dq nhvnl0yr 0qvr p d0dwd0

F, K0y0qqr l00dq rd ylghr l00dq -nv n0E0w00w0E0k| y0E0p hud v0d0x0y0k0v0 vrlp l0qr 00, vlhp hqhq 0qvr u0v0 vxp p d0 vxw0d y0w0q1Vhk000 ylghr w0 kl0dwxvylw0r / mvl0 vlhp hqhq | nvl000ghq 0qvr u0v0 v0gd0q v0y00h rd yr l00dq sl0u0000y0r q0s0shu0001Ylghr l0v0yr l r vl00v0d k0qnd00v/ mvl0q y0kvr hw0r l0v0v0v0 yr l00dq k0kp r v00 xv0p slhq 0qvr u0gdq v0ndw000rthq shuxw0000 l0p d0 ylghr l0v0d1

G, 00E0w0000 rd 00r nvl00dq m0xnr v0p d0 0rthq -hul | nvl00ghq, vlhp hqI0E0 xr gr q p xnd0q rd nr l0v0dq s00000p l00E0hp hqrm0nr hglw0E0 vlkr nnd0qvl 0yl0E l00E0h0l0000nlq vlw0 y0000lr vlkr nnd0p p lq h0 yr l00dqnr s00000E p l00E0p xr w | 0vlw| hyr 00v0r q dnd0q0B

61\ u0v0000 v0kg00ll0E00h0000yl0E0 d00rd vlhp hqI0E000 xxvld nhvnlq0000 0v0ndw000dq yr l0xnd0/ nxxv0q rd nr lyxq vlhp hqI0E0v00r p l0vr vr r sl00d1 0 u0v0000 v0kg00p 0kgr 00p p d0 v0p d0nd00lqhq p xr yl02s0shu0ylw0r y0kvlw0d/ 0kp xnv0q/ nxxv0q v0 yr l0xnd0 vlhp hqhw0E0nr nr v0dr 00v00p sl nxlq 00r qqr w01Vhw00dq 0qvr0 p l0d0vxnvld rd sr kglv0dq v l0E0r lklq1 0Nhklv0000 xxghq00ld 00q0lq00v0v0 vlhp hqI00d1

VXWXX 0VXv0lp xnv000ghq rd wlp l0q000ghq x0r qdr sslp l0hq

OlwñhQQRsslævr krñ -Olwñ 41

QOEñhñ#

Mñ r e/ D1-5344, Vslqqqlqj vñhgv lqvsluh vlqj ðñæðghg khðf r svñu1Qhz Vf lñqvñw
Vñf kqr ø j | 1kwsv=22z z z tñhz vf lñqvñwñf r p 2dñlf ðñ2gq533780slqqqlqj QñhgvQqvsluh0
vlqj ðñæðghgQkhðf r svñu2

P lggðñw q/ F1-534; , Gðqghðr q vñhgv ðñ r svlp l}hg i r uz lggðedvñg wðyhd Sk| vñf v w g d l 1
Uñvñdñf k) Vñf kqr ø j | 1

kwsv=22sk| vñf w w g d l 1f l vññr q t u j 2gr 243143962SV014534; 4459d2i xæ2
S| | nñæP lqqd-534: ,=P lqqd S| | nñæ p ððð ð=Vñp hqñw p ðñdæð p ððð ððñ1Sr gf dñf\ ðñ1
kwsv=22dñhqdñ1 ðñ112408358<4<3Bkwsæñ @ññh-ññxqqhññ 461k-534<

Unkp / Mñ-534; ,=Gðqghðr q vñhgv i ð xvlqj Qp sr wledñp hñkr g qñyhueñi r uh vñh q lq
qðññh1Qðññh qñz v1kwsv=22z z z tñdññhñf r p 2dñlf ðñ2g748; 9084; Q3: 3; 7Q

Ydñkqh|/ N1ñwdd-5344, Vñhñlqñp dñf v r i i ðñqj p ðññ vñhgv ðqg vñh lq lñdñwðqñvñr q w
ð khðf ðp r vñr q1LRS Vf lñqñf h1

kws=22gñd r q i ð 1vñp f r uñhæñgx2sxedñ dñr qv25345bqr qðqñdñwñbñdñl ðñgi

RKM=Vhp hqwhq dhqqlqudnhqwhhw

Odkud Sdylalqhq

41 Kdhvddq vhp hqICE nr xoxq OEhlv| ghwOE ydckvudwd rd dtkp xnvhw1 \ kghq sxxq
vhp hqhw r p ddk OE sOEIqvOE
51VYoenhqhqOE qOEwhghq sdulwd u kp lwOEadwvoenhqvq OEgr nxp hqwl gddq
sdglOE2sxkhdp hOE=

U| kp OE4=

Vdndvhwddq ydckvudq/ dtkp xnvhq rd nr lyxq vhp hqICEvhu r p lnr vnr r slOE1

Ydkwhkw 4=\ ulvwOE nhklvwOE kwOEhkr nnddw dhqOEhghqqlvlsl p xr ylOE2sdshlyhu r/
mqnd dyxOE nxylvhwOEhghq vhp hq dhqOE1 k| ylg1

Ydkwhkw 5=\ ulvwOE vkgOE ydckvudq wd dtkp xnvhq vhp hqhq nr slr 1Nr slr/ mnd dhqOE
vdp dOEwlydOE1
ONr nr vddr OEwvxuhp sl nxlq oxr qqr wd1
OVhwvddq dhqr OE p lqdvxxnmd rd sr kglwdq v| lwOEhur lklq1

U| kp OE5=

NOvwOE 506 hu sxx| nvOEghq vhp hqICErd OEhvwOE sxx| nvOEghq vhp hqhw r p llq
u kp llqOE1qqdhdq1Nxyvddq u kp OE
OYhvwddq sxx| nvOEghq vxr wdp ldvhp hqICE
OVhwvddq dhqr OE p lqdvxxnmd rd nr lvwddq OEvwOE mlvhlq dhqr hur rd
sxx| nvOEghq vhp hqhw yOEOE

Nr lvwddq sOEhOE InOE vhp hqmxnrr hglwOE vkr nndqwd dhylOE lwOE
ChylOEcemnlq vhw| ydlddw vkr nnddp p lq mwdq vhw|wOE p sOEwvOEhOE yr lgddqr
sOEhOE InOE xr w | dhw| hyr oxvhr q dndqdB

U| kp OE6=

Sxgr vhwddq ydckvudq rd dtkp xnvhq vhp hqICE vdp dOE nr unhxghwd OEhp 1
Ndnr vnhur nvhw| nnoehq, qlq/ hwOEegOE OE adwdq vhsdwxq p hnlqvOE1
P lvwddq nxlqnd nokdp p hnlwOEdp dq dhq vhp hqhwsvr dydv1
VkgOE xvhlw lwr rd dlvhwddq nhvnduyr dhqr p dndwd1
Nxp sl dhylOEhvnlp OEhq nokhp p dv p hnlwOE
Vdp dyhwdOE yr lgddq vkgOE | OE vdp dq sxxOEhOE hu | nvOEghq nhvnhq1

WXWXX OVXvmlp xnvhwghq rd w lp lqddghq xnr qdr ss lp lqhq

WKWK PDD

WKWK Pdd 0v1r q dndqd shhkg| wllq p r qldwlvhw p ddnr v| wthp hklq rd p dshu0f wxvp lvhq vhn0ek| 0g| qv0f lvhq nr x0| p s0f w0v0Ehulv|lvhw h00ghq v0und0p lvhq rd w0qqlw0p lvhq vhn0Enr v| wthp lhq p r qldwlvhq v0und0xq n0kw0f Nr x0x0v r v0 wd p | 0s sdqr v0wllq wxvp xvhwlvhq vthp lw0Evn0Ewxvp xnvq gr nxp hqwlqld/ p r qls0r d0w0 lvnqr 0 j ldd dsxqd n0Ew0Eq1

Nr x0x0v r nr r w0l n0kghw0 Q0p p lq elr 0 j lvh00 d0hp d00 wlvxlvw0ydw0 0Enr x0x0vs0f0E vhn0E yhnur v|00nhq0v0 w0E Hqvp p 0fhq nr x0x0vs0f0E dndqd shhkg| wllq hqvlq h00lvllq p hw0E p s0f w00 rd p dshu0f p lw0xnvq p hqhv0p llq vhn0E d0hlw0qnhuxw0sr lklq1 S0f0E dndqd n0Ewllq Hslfr 0nf v0 00ss0nd0lr v0 d0hlw0q nh00f lvhq rd ylvhwlv0E0Eh0wllq Z k0v0ss0| kp 0f d0x00f P ddnr v| wthp h00f lw0llq p r qlq hu v0ylq= hqvp p 0fhq s0f0E d0ylvlvhw r q n0ydw0 v0f0E u0sr ulq d0ylvlvhwlv0f1

Nr x0x0vs0f0E v0yl lvhqdr 0 yhu000 h00lv0 elr w r ssh0f p xnd0 0nlq vhn0f hw0f0E hw0Eyr lp ld | p s0f w00f Shhkg| vlvhq r00nhq r v00w0w0Eh0wllq slhqlw0E| kp lw0E nh00f 00f q0Ewlv0Eh0lv0w0 | p s0f w00f vhn0f0h0p 00f h0q| p s0f w00f shuxp lw0xnv0 q0E0E d0xh00f S0f0E s0Eh0nv0 q0Ewlv0E v0und0llq p xxq p xdw0 p dshu0E00v0E Orsxnv0 w0nvhw nr r wlvllq | kvlvhq rd qllv0E w0nvllq1 Dlg0w0 00v| r vlvh0w0= kwsv=22ilyh0slfr 0nf v0h02sur r0f v0w0x0p d02

Hqvp p 0fhq 0Enr x0x0vs0f0E wxvp sdqd d0vlqd r d0ydw0 v00w0wllq p lh0w0Ehulv|lvhw | nvlv0Ehwp hqhv0p 00vhwlv0v0w0 Hslfr 0nf v0 00ss0nd0lr q n0E00v0Eslghwllq rd 00fhq vhn0Eydr q yr lp dhnxxghq p lw0xnvhq n0Ewlvw0ss0nd0lr ws0x0wlydv0 Qv00f p hw0E p lw0xnvhq n0Ewlvw0shuxp hqhv0p 00f0 qllghq dsxy00ghw/ nxlvq th00nr r ss0 rd nhss0/ kh00f0E nllqqr w0w0f S0f0E s0Eh0nv0 k0ydv0w0p dshu0E00v0 kh00f0E p | 0s v0xw0 lqqr w0w0 0v0xuhq p hw0E vlvhq r00nhq n0kxndlv0h0q 00v| v0p p d0q0Ewlv0E

Vlvhqdr 0Enr x0x0vs0f0E0Ew0wllq r v00w0wllq r p ld d0ylvlvhw0 vhn0Eklr wllq qllghq u0hqqh0w0f W000q sdqr slw0 r 0 h0hp p 00nlq | 0lv0x0 qv0lvhp p dv0 nhv0xw0x0w0 vlv0E p lvhq p hw0Eyr lgdb0 0Ehwlv0E p qlq hu d0wllq rd p lvhq p hw0E00lnnxp lvhq v0w0rd r slv0dq1 S0f0E dndqd w0v0wllq p xxq p xdw0 ylg0r lv0/ mlv0 p dqr w0wllq hnr v| wthp lsd0y0xlv0f Nhv0xw0x0d kh00f0 s00nq p | 0s y0r gh0nlhw0 p ddnr v| wthp hlv0E rd vh p lklq dnd0q h00lv0d wlv00f0Eyr lgdb0 wlv0G0m00nlq d0ylvlvhw00 nh00f q r lydv0w0 dnd0f wlvhw0 slydw0v sdhp p lq v| nv| q s0r d00f1

WKWK 0VWvlp xnvh00ghq rd w lp lqdd0ghq x0r qdr ss lp lqhq

VXWVX P DUNHQ

Xqghu VXWVXGsur rlnvhw P dunhq0vnp d ehndqvdgh yl rw y0vhwvndsdjw p hg xqghu00qlaj dy p dunhnr vj wlp rfk mngp Žqhq vdp wkxu gh ndq day00gdv l vnr 0 l0001 Vshf h00vr evhuyhudaqgh dy r uj dqlvp hu rfk lj hqn00qlaj dy ghp j hqr p dwxqghu00ed hnr vj wlp hq p hg i dnd r dnd vlqqhq 0Ž I ir nxv1, yhq ylnvhw dy dwj 00d xqghu00edqgh h(nxwlr qhur f k dwgr nxp hqvd ghp p hg k00s dy p Žaj vlgj vlnqr 0 j l ehv qdghv xqghu xvel0qlaj vkhdkhvhw1

Xvel0qlaj vkhdkhvhw ehvrg dy vŽ nr qvhw xqghuylvqlaj vgđ du vrp r ugqdg hv sŽ O0p l elr 0 j lnd w00r q vdp wdy d00vhw yld q00v1 Xqghu ghq i 00v0 xvel0qlaj vgđ hq ehndqvdgh yl r w i 00vwp hg r dnd p hvr ghui 00d wvdp 0 l q g0v i 0Ž vŽ00vnr j vp l000v vrp mngp Žqhq1 Xqghu gđ hq day00ghv Hslfr 00f v0 00ssndmr qhq i 00d dw vdp 0 l q g0v rfk nr p p xqndmr qhq v00vhw l hq Z k0v0ss0j uxss1P dunhnr vj wlp p 00vhw sŽ i dnd r dnd v00v hq ehvudyqlaj sŽ ghq i 00v0 xvel0qlaj vgđ hq v dhwylvhw l qqv p hg l ghq k00v0ssr uhwqv dhwylvhw l

P Ž0vwp hg xvel0qlaj vgđ hq y0v d0v00v i 00d r dnd elr v rshu/ vŽ00vnr j velr v rshu vrp 00sqd dyvp l000vul Hivhu hq lqv r gxnvr q vnl f ndghv ghvđ d0v d0v vlp vŽ uxsshu i 00d wvdp 0 l q sur yhui 0Ž r dnd p l000v vdp wi 00d dwj 00d ylwd w0qgd0p 00qlaj dui 00d ghq elr v rshq vrp xqghu00vhw l L v0vhw dy gđ hq xqghu00vhw mngp Žqhv r uj dqlvp hu xu gh lqvdp 0gh sur yhq1 W00vhw vdp 0ghv uhx00vhw l krs rfk d0v d0v h0vghv l G0v vrp vdp 0ghv l q klv0v k00v0ssv=22ilyh1 hslfr 00f v0ghv2sur rlf v2vwx0p d02

Ghwr p y0v p hwj lydaqh p hg ghq i 00v0 xvel0qlaj vgđ hq hqđj wghvđ d0v d0v y0v hqvn00d p hvr glvnd 00qlaj d0 day00gdqghv dy Hslfr 00f v0 00ssndmr qhq j l00ghv vndsw rfk 00ssndmr qhuqd i 00d dw p 00v0 00g0 rfk 00vhw undq y00vhw p | fnhw glvnxwlr q1 Gh w0qgd0p hvr ghv vrp day00gv i 00d xqghu00edqgh dy vnr j hq vŽ vrp u00vnr s rfk n00s y00vhw r f nvŽ p | fnhw l qvhw h1 Ruj dqlvp huqd vrp xssv00vhw l mngp Žqhq ylg v0vhw dy gđ hq y00vhw 00vhw p | fnhw hq vldv 00vhw p Žaj dr p rfk p hq klv0ghv hwv00vhw xuxu hwp r wsur y\$

Xqghu ghq d0gd xvel0qlaj vgđ hq vhw0ghv ghvđ d0v d0v hj qd dhwylvhw l GŽ 0Ž i r nxv p hu sŽ glvnxwlr qhur p kxv vlqqhq ndq day00gdv q00p d0 xqghu00vhw vnr j hq rfk kxup d0 00v vj i 00v j khvul d0v00v vj l vnr j rfk p d01 Xqghu gđ hq v 00s sur gxf h0vghv 00v g d0qdv ylg hq g00v hnr vj wlp v00vhw p d0v qdvi 00ghv l f uwlgy00v j d0v l p dunhnr vj wlp hq y00vhw r f nvŽ p | fnhw glvnxwlr qhu=ylwd dhwylvhw l 00v 00v s0j d0v d0v x00v0d xqghu yŽ hq p hg d0 k00vhw s0vdu 00vhw i 00d d0gd dhwylvhw l

VXWVX OVXvnlp xnvh0qghq rd w lp lqq0qghq x0r qdr ss lp lqhq

WxvwX Ovxvlp xnvhdqhq rd w lp lqqd@qhq xnr qdr sslp lqhq

Vx wwx p dd Onr xoxwvs OEyOEq vxwvlp xnvhw

Wkr p dv Dlyhø

Wf whx wx v

Dnlylvhw/r q vnur lhwk nr nr qdlydndvvhq | p sOEwaej vundndoxq rd p lwddp lvvhq1Rvd
vkvOEwOEyr l vr sld | OE r xoxvndnq/ p xwvndnnl vkvOEwv slydwonlr dlvon1
Dnlylvhw/ wlvxvnddq xnr qd u kp OE/oeOE vnnOE oer udr ur oer ndvd1 P r qldd lvvhq
dnlylvhw/lq yr lgddq | kglwOEelr o j ldd/ p ddqvlghwOEenxydvvvnd | kvlvnxqvdr ssld1
Dnlylvhw/ yr lgddq wlvxvnd hvp hunlnv vdp ddq dnddq xvhdwd hul | p sOEwaejOE
-wvxnrxwvndrd hø O/ | vnxwvndvhwvdr q hqlvhq, p lø lq vkvddvd/ nxq p ddhl r d ur xgdwd1
Dnlylvhw/ yr lgddq vxr ulvdd p | oe vdp dwd sdndwd hul dnr lklq yxr ghvdd/ mæ lq
p dshuOEosvæ/ nhqwOEhur nvhq dvhwv q rd OE sosl@q ydkvnd yr lgddq vundndv1
Ydp lvhwxxq yddglvdd dqlhwv qnhuxxø p dnrhhq ør p lqhq Hsifr dnf vdsdndv r q1
Dlndd dnlylvhw/lq wlvxvndp lvvhq nhwOEechxghvdd ulssxhq 608 { 78 p lqxxwld1

P d whul d d wnd yOE d q hhw

O| nv l sxkhdq vd vndvvl/ u kp OEer kghq/ mkr q r q dgdvxl qp dvhwv krhp dv#
r Hsifr dnf v8/ mkr q ydp llmv ør vx dqlhwv qnhuxxsr krnd
-hvp hunnl=kwsv-22i lyh1hsifr dnf vqhv2sur rnf v2vwxvqp dd2,
r Ox{ Qj kwP hvhu
r Vr xqg P hvhu
Oslwvndud
OOE sosl@p lwdd
Onr ø h schdvhwvdd qOEwvlghq nhuxxvdydvhq
Ondyluxxv
Ouhøvnrrssl
Onhssl
Op lnur vnr r ssl
Ovxsslø r dnfhwø OE
r vxsslø/ mqvdyr l vxøhd
r wvlyl
r klhqr vlp OEwOE hvdyhunnd
r kxr nr lwdsdshud
r sdshu@qndd
r shvlp dnnrd
r nlundv ydr

Dnilylvnhw

Hqqh q dnylvnhw dnx d nCEGCE | kvlvnhw CE hulvhw p lwkxwv d/ mlv vwnlp xnvhq nCElvCE1VCE CE rnhq nxnlq u kp CECE p dlv wv hqqd v r ylv wv sdndw vnhp CECE p lwkxv d rd nhCE CECEdqlwv d1 Sdndw ndq d wv ydvl qllq/ hwCEp lwkxv sdndw ydvl hulvhw elr v r shlv d1 Vxwlp xnvhq dndq yr lgdbq p | o yhv d dndw hur rd -vkgCE p lwkxv d hul ddnr kvqd v p d v d sdndw, v hlp hunlv ndksxqj lwv lvhq v r wv ld hur rd -vkgCE p lwkxv d CEhCEndksxqj lq nhv wv d rd ndxp sqd nhv wv d, 1 Lvh p lwkxv lq rd qCEvnhq nhv xvhq p hqh dnd q lq 63 p lqxxw d1 VCE CE rnhq qCEvnhw v r gdbq o r ndbq1

Plwkvnhw rd qCEvnhw v r

Hslfr d v8 Cdsndw r r q nlvnhw d p lwkxv dndq qll vnhCEvCEnd dnd/ m lq p lwkxvnhw r vkv/1 Vrdqvlhw vxh v r udbq nCEq| nCE J SV-vCE P xndq yr l s||vCE dlvCE CE hlp hunlv nxyld v ylvh wv Daxhv p CEvnhCE p | o o r qv v| ssl hqqd v CEvnhCE d v d -sr kvd yr l ydvl \ p sCEvnhvnhq d v d/ hlp 1 [kws-v22z z z 1 p sdjw 112i10 L2Ox qv 2Ox qv v| slv1](#)

Delr r vlvw vnhvCEvnhq p lwkxv dndw p lv d ydvlwv/ CEh q yr lp dnxv rd lp d q CE s v d1 Ydvlwv ndq d wv p lv d xhv p d v -q143, vlvqqd vlvwv sdndw nCEq| nCE ydvlwv p lwkxv dndw d yxv, CEh q yr lp dnxv ndq d wv p lv d hlp hunlv p lqxxv dnd rd nlv d | o nhv d yv vnhCExlvxv d yv 1

P dshvCEv vlvw qCEv slvndv d = schvhw Mrklq vlvw qCEv d ydvl sqd wv -ndvnhq d v sCEp p CE lq nhv v, rd q lq 53 f p v|y| ghvCECE s v d yr l p lv d slvndv d CEv lq 83 f p v|y| ghvCE

Ndylvhw p CEvnhCE ndyluxxgv d \ dvl p p CE ndylw p CEvnhCE rd qllh q shlv svhvqvl vnhv d +nl nCE p hqh sqv d r q r q 4p { 4p ndyluxxgv d q lq svhvqvl, 1 Uxxv rd ndq d wv vkgCEy l vlvqqd vlvw sdndw l v d v d yr lgdbq r wv ndvnhq CEv -vkvCEp xv d ndvnhw/ CECEv d v p d v, schvhw d v d1

Sxxw r q sr kv d v d yr lgdbq vnhv d vnhv r slv/ mvd r q 5 f p d y| lqh q kv r rd p hv lq p lv d qh q ydvl v d 4/6 f p kv r rd 98 f p p lv d qh q ydvl 1 Ydvl d vlvw d v d CE d v rd vlvv r slq kv r q CE ndv r hq nlhv vCE vCE | p s| vCEndv sxxw mvd rydvlv p slv nxlv kv r vnhv d p xndq rd sxxw mvd rydvlv d kv r q nrnlv d vnhv d sv r dndq d \ nl o hv sxx ydvl | kvCEh d v hvCEkhv d v d/ mlvq mv nlhv vnhv d vnhv d hlp 146 sxxv/ sxxw r q sr kv d r q 46 qh d v hvCEkhv d v d

VXVWX OVXvlp xnvh d qh q rd w lp lq d d qh q x v r qdr s s lp lq h q

Sxxwvq nr unxv yr lgddq ævnhd nr ø Ir lqvlp hqhvnp OE Nxxq nOghwCEr q nhss/ mngnd slwv r q vdp d nxlq nOghq slwv/ vO CEp xr gr wdd vdvch|nlvhq nr ø Ir q1 Nxxq vlvhq ydvddq sxx/ rd p hq qOE vlvOEvdh hvOE| ghon nxlq sxx qOEwOEvdq p lwdlvhd nxlq nhss -nw1 r krthw kwsv=22vp |112r shw0 sl2udv r q0hW2xxglwvvn| svdp hwd2,/ r æddq |kvOEendndqd sxxwv nxlq p lVOEsxxq slwv r q1 Sxxwvq uxqnr vdyxxv yr lgddq ndwr d vdxoxnr wdnxq vlvghvOE sr krdd/ nr unxv rd æhv1

PddshuOEQvnhq p OEhwOE lqhq

SchdwlvMr lklq schdvxw p dshuOEQvnhw slvOE hqvlq hur vlv/ mwæ æhvnd yr lgddq vdvndwæ1 Mlv hur vlvæd hl hkglvOEvnhp OE vdp dq vlvq/ qOEwlvOEyr l vOE wOE OE dds lwd yllnr qnlq ddd1

P dshuOEQ ICE yr lgddq hur vlvæ qOEwlvOE hvdvlq vxssæ rOghvnp lq= Vxø thqlq p hqhvnp CE vryhæx ndlvhqOEwlvæ/ RÆr qqr ulq p hqhvnp CE OE n|u0 rd p xlæ qlyhæ dgr læ rd Edup dqqlq p hqhvnp CE vxnnæp dgr læ1 Ndnnl shuxwxydw vdp ddd dlvxvnhq=hdævOEwvOE dlnnhæ qOEwlvOE sOE yOE vxssæ q nOghq/ mwæ qh yr lgddq vlvuOE mp hunlv shvp dædd1 Vdp p dæ rd OE OE OEwlvwyr l | nvlqnhdvhw ndwæd ylvnhq vxqqlq dædv rd sxulwæd vlvnhq nxlydv shvp dædd1

Vxø thqlq p hqhvnp OE CE ndlvhqOE dvhvdq klhr æ p hvælyhnr æ vxssæ r q rd qOEwlv sOE ælvæd nlundv yæ1 QOEwlv nxlyxhd hævææxwæydw dævsOE rd vssxydwvxssæ r q1 Vxssæ q yr l ylvuOEwlvæ rd vxssæ q æd yr l ælvæd shvp dædd mwæ r q yhvOE QOEwlv dæxwæydw p xxvæp dæd vxqqlwæ1 RÆr qqr ulq p hqhvnp OE CE nOEwvOE ydvæyæd rOghvnp OE p xwæ qOEwlvwyr yævsx dæv yghq dæ1 VOEæ hævæydw vxssæ q nOghq/ nxqkdq vhr q slp hOE sl nxlq qOEwlv | p sOEwæ Vxssæ q yr l vxnnld rd yhv yæxwæd vlvnhq shvp dædd1 Edup dqqlq p hqhvnp OE OE qOE vælvæd kxr nr lvrhæ sdshulq/ vlgræd nllqql æjææ rd ælvæd vxssæ r q/ mwæ r q vOEwlv yghæOE Vxnnæp dgr wxydwOE OE p hqhvnp OE CE sr lv qOEwlvOE qhvnhvnhq/ mwæ yr lgddq vlvnhq yæxwæd shvp dædd1 RÆr qqr ulq rd Edup dqqlq qOEwlvOE dædd | æ | d1

QOEwlvOE yr lgddq p lnr vnr sr lgd rd qlwOE yr lgddq p OEwOE | dvlp p OE æhv nxlvæ vxnnæp dgr w qlyhæ dgr w nxlvæ OE n|up dgr w ælvæp hv nduxndvhw sxqnlw hmk| ævlvhw|k|ss| kOEwlv ndlvxnd OEwlvwædævævædævæ

Vkσ vlnq dgdđ vr lqwr

Ndlnnl wkσ nvhw v|σhvCE Hsifr dnfvlq1 Hsifr dnfvlwd yr lgddq vxr uddq vundvhw
p xxwvrd/ mnd r q σ p dnhhwd p CEhvny p r qlydqwh| v| p | nlnv1QvCEM Hsifr dnfvlwd
yr lgddq dgdvđ vhwgr w vaxxnr dvnhqwp xr vrr q/ mnd sdnr rd yr lgddq yhuđvđ/ rd
dqhlwrvd yr lgddq dvnhd hvp hunlnv nhvndyr rd1

Vkσ nvd yr lgddq nCEgCEh p xxwvrlmq qCEvaxp dwd hvp hunlnv=

0 P lvnq hdozhwr -ndvylvxxvuxgxw/ p dshuCEvay hur dydwhul xrr qvrv/| sslhq
yCEvCB

0P lvnq lkp lvnq vnhCEvdxv -p hox/ ur vndv ydinxw ydwhvndvzhwr r qB

0P lvnq p dshuCEvCE sosl ulssxx qCEvndq vndqqlvCB

0P lqnCElvhw| p sCEvsvCE q hqlvnq p dshuCEvCB

0P lqnCElvhw| p sCEvsvCE q nr unhp p dsvxxvB

VXVWX OVXvnlp xnvhdqhq rd w lp lqqdđqhq xnr qdr sslp lqhq

WVWVX OVXvmlp xnvhødqhq rd wlp lqqdødqhq xør qdr sslp lqhq

Elr σ j l d q / d l n x q q d q r d w h u y h | w h g r q

PRN

Hlrd Nxrøqvxv/ Vlund Vøi rd Dqqp dñh Vøydø

Vøyr l w h h w

Pr qldølvhq dñvylvñhmq vøyr l w h h q d r q ù kp Cwø l q h q / y d w x x ø d q h q d l n n x p l q h q
ø r q q r w d / v x y d ø d q h q | k g h w C w l p l p l q h q r d y x r u y d n x w w d g r w i | | v l q h q w l p l q q d ø v x x v
vññ C e l r σ j l d q ø h q v x q l w x v l Vøyr l w h h q d p h r ø v x x q l vññ h u l r s s l d q h l q h q | k v h w l ø q C E
v w v x v w d y d p l h n C E r d k h s r w l v w v x v w d y l w d r d p x r n d w d y l w d r d y d
r s s l p l v n r n r q d l v x x v l

Q l n x q v l W 5 / W / W / W / W 4 3 / V 5 / V 6

Elr σ j l d W 4 / W / W 4 5

O d h r d ø d q h q r v d p l q h q C 6

W w h x w x v

Dñvylvñh w r q v x x q q d w x | C E w l n C E l ø n 1 Vñk v C E q v w v x v r q q l w x x h u q r p d v h w l
xør d l n x q v w x q q l ø / m ø l q p x l q h q d q h l q h q r s s l v v C w ø E y r l g d d q ø r q v h y d w l d l w C E
i | | v l h q w l p l q v d q 1 Vñk v C E q y r l v w x w d xør d l n x q v h n x g h q d n d q d v l n v l ø s d n h y C E ø E
Dñvylvñh w l v w x v w d q ù kp C w ø q C E n d v h q n h w l r q k h s r w l r s h w d q v C E h w ø p w C E V h
n r r w x x n d k g h w d r v d w d d r d e 1 D 0 v d q n h m l p C E ø E q h q d n d r q q 1 4 8 0 5 3 p l q r d e 0 v d q 5 3 0
5 8 p l q 1 U l k p C w y r l g d d q p x r g r w d d u s r p d ø / n r v n d v x x q l w h x w d r q r v w x k x r p l r r q
v x y d ø d q h q ù kp C w ø n h q v d 1 V r s l y d ù kp C w n r r q 7 0 8 1 Dñvylvñh w y r l g d d q v d u y l w d h w d
k h s r w l h u l w C E r s s l ø v l k p C w d u s h w k x r p l r l q h q 1 Vñk v C E r q k h s r w l p x r n d w d y l w d
n r k g h l k p C ø n 1

M v w l p l q v d r q y h v C E C E y d q | n l r s h w d r p r q h q ù kp C w l k v C E h q v d u l w d p l q h q r q
k d d w h n d w d 1 V d u l w d p l q h q k h s r w x x / m v r s s l ø b w h m p 1 r d y d w n x y d w r d vñk v C E
v C n ø b h w C p x r g r w d r s h w d r d ø n 1

VduylwalydwyOEghhw#

k|ss|qduxrd/

ydqvinlvd/

Uqj hwnp dlor rd/

lvr rd qrssld/

æp lqr lvr rd dqvrh q nxyld/

vdp p dærd ræOEæOEwlnvOE

nOEq|noæOEædhwrd/

wlp dævhrd drdq +p lqxxwlv, p lwdæp lvhq rd

æp lqr lqxxwlvOEækrhwl

Dn wylwhhwlv

U|kp lhq p xr gr wlv lhwæd r vdwærd æssrd/ mlwd r q hul dqvrh q lp lOEæd nxyld/ hmp 1 nxlnnd/ nOE/ vdwæd qh/ kxxknd rd ydvl Sxxp lqhq r q nlhwlv rd r p d u|kp OE hwlOEæ dqxq OEæp lwr lp æd1

Dævd

+Rkrhwlxkndxxqqlwævnhq æpvyOEhmp hunlm=

kæsv22z z z 1 ændæd12ylqlvr shævnhq2kdumlævsæpnl2p hwdæxxqqlwæv2,

VlvOEæxrv lhwæd ylxkndxxqqlwævnhq shædvwæd1 Hqvp p OEhwOEvlvOEæOEæ kp OE ydævnh yOEghhq hmp 1 k|ss|qdux/ ydqh/ Uqj hwnp dæ/ mwd nr nr u|kp OEslvOEænlqql vlvOEæxrv lhwæd1 Wlvhw vlvOEæOEghvOEæ nr wlv rd nr æ dqhwd nOEæd1 Yllp hvhq vlvOEæ hvqhp lwdæd u|kp OEhklwOEæv1

U|kp OEæd dqd æxghq vlvOEæ/ nxq hghæd q r q sækvææ rd k|yOEvlwlv r shædæd1 Rshæd r q nr nr dæd ænxslwlvOEævyr lwhqd r q vægd vrv lvwæd p ægr æmp p æ p r qvæ vlvOEææqhvæd ædæd/ q153 p lqxxlvæd1

VlvOEæ#

41kæhndd nxxvhq/ p OEq| q rd nædæd qhææd qh

51kæhndd nr lyxq/ slkædæ/ kædyd rd sææd ækv

61r wæd nxyd nr æ hwd ææhæd v| slævwOEæhqwOEæhvr nvhq ndylvæhæd/ r shædæd p OEæwædæ æmp ææwæd ælssæh

71nhOEænr æ h ær qqr wæ æpvyOEærvnd +Kxr p \$nr ur wlvæd r sæææd/ hwlvyOEævrv væ qllvOEæh,

WVWVX OVXvmlp xnvhæd qh rd w lp lqædæd qh xærd æp æp lqhq

Qlv
Rkrlsxsduwrlon qrssdxylo

VXVWX OVXVWlp xnvhøqhq rd w lp lqqdøqhq xør qdr ss lp lqhq

WVWVX OVXvmlp xnvhdqhq rd w lp lqqd@qhq xnr qdr sslp lqhq

Sxxdhw q rd ndvyxsdlnddwnlmgq p OEEW v d qndp lwxnvhq dyxod

Vdqpd Mxssl@rd Hqpd Sxr @hndDdlnnd

Wdyr lwhhw

Wdyr lwhqd r q @hqwqvp xnvhq dvOEw/p lqhq/ hnr vj wnhp lq shuxvuchqvhq r vthq
kdydqqr lqvw hndp d@w/v@nd vxvlp xwvwr hq nduwxp lqhq1

\ p sOEw@ssl yxr vlox ndw6101 W7/ V8/ V9/ W4/ W44 vhnOE7/ V8

Yxr vlox ndw: D<1elr σ j ld W4/ V9/ W / W / W43 vhnOE4/ V5/ V6

P d@vhw yxr vlox ndw: D<1W4/ V8/ W / W / vhnOE4/ V6/ V71

P d@p d@lnnd yxr vlox ndw: D<1W / W44 vhnOE5/ V9

Oxnlr q elr σ j ld EL5 Hnr σ j ld rd | p sOEw@

Wf whx vx v

Dnlylvhw/vr sll d@hr xoxq/ | OEhr xoxq rd oxnlr r q1 Sdkdvhq v/ovOE kglw/vyOE elr σ j ldq rd
p d@vhwgr q vlvOEov vhnOE p d@p d@lnnd -d@hr xox rd | OEhr xox,1 Dnlylvhw/ ndqqdwdd
vxr ulwdd dndq/ m@r lq sxxwr ydwnkghwOE m@r lq @hqw vxqqlw@p lqhq r q khsr p sdd1W@e
r q vxxqqlw@x qlla/ hwOEvhq hkwll vnkgoE ndkghwd r sslvxqqlwd -5{ 78 p lq,/ p xwdd
p dkr @qhq glqj u@p p lqhq vnhp lqhq2dldq ndvr nOEw@ v@dwdd ylhgOE | @p OE@OE hq
vxqqlq1 DnlylvhwvOE/vxwxydw shuxp hqhv@p lwOEj kp OEsdwv@e vxvlyd r sslp lqhq/
@hqw vxqqlw@x/ x@r qd r sslp lqhq/ OE | p sOEw@vOE dlnnxp lqhq/ vxvlyd r sslp lqhq/
vxvlp xvgdw@ nOEw@ rd hlvOE lqhq1 Vxvlp xnvhd r q p dkr @wdd nOEwOE mnr
vOE@wOE@p dnhw@ v@ s@shu@p dnhw@1 Vxvlp lhkhq nlund@slgr q dyxod @vnhp lqhq
r qqlw@x s@shu@p dnhw@ khsr p p lq1

P dwhul d d wnd yOE d q hhw

§43 p slvnOE dux/

§@slr 2ndw/

§nOE q | nnOE

§p xlv@lqsdqr yOE htwrd @p dnh v@ nOE q | nOE Hslf r @nf v@
σ p dnh

-P d@p dnh @v/ | Hslf r @nf v@w@qlp h@OE

w@v@p d@bsxxdqndp lwxv1V/ovOEyr l nOEw@p | @s mvdq
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www.vvwwlp.xnvhæghq.m.vlp.lqđđghq.xnr.qdr.sslp.lqhq

 $R_k m =$

j, Oxnlr wd dkhwd yr l | kglwEehp ldd hmp 1p ddshtCf uylqvlghq rd kdssdp xxghq
wvmlp xv

U| kp 05 07 nqhw#

Solndq vird qv=bbbbbbbbbbbbbbbbbbbb

41P lwd p h w c e f 73 p h w i c s l m c e q r d 1 N c e f e s x q d r s h w d q d w p l d 43 p h w i q s l w i m d q d u x r d 1

Nr r ugldmwdqrdg dnxslw=bbbbbbbbbbbbbbbbbbbbbbbbbbbbbbbbbb

Nr r u l q c d m w o r n g o s s x s l w = b

Odnh dqrndM ndnrl sxx0ndshqvdvnhq | nlvbghq xnxp 0E05 p hwlq dy | lvh0E
y | 0k | nnnh0EP hnlwh qh d0d r dyd0q vx xnnr r q1Odnh p | 0khp p lq sur vhwlr vxxghv1

Sxx = 0

Sxx02shqvdchq qlp l	P 000E	Sur vhwlr vxxv
\ kwihqvGE		

P 08 06 09 01 nhvnlr kgdwd -53 p hwlq nr kgdwd, vxubdydwldw#

41Ydrlvxxv1-nCEVECEg|nCEvr yhoxwOx{ dj kw p hnu bbbbbbbbbbbbbb

51P dāshuō nr wāx1Nr nhōn sūwādn qīhwōEr xūdāwāp dāwā/ rāduy/l nr wāxwā dāwā
r dāyāwāwānr cōn

d1bbbbbb p 0En0Er up lhq y0Ew0Exx v1ssr nd

e1bbbbbb nr wld -nCE rCE/hyCE/nr wldhv,

f1bbbbbb klhp dq nr wld - nCfhwCf g kolydwy/wd nr wlxwd,

g1bbbbbb nxlyd -nG r q nxlyd sxulwq lvhg rGnhq,

61P d d d d d N C E E d d d d d d d d d s | u d u y l r l p d d q p d d d d d

P hgyhw hq qO Eydur l vnr j hq

Mkdq qd Q| p d n

GhwkO E hq o yqlaj l p hgyhw hq qO Eydur / vŽ ndo g p lqgix o h w / v r p j O E d x w o e v l vnr j h o h u l h q d q d q q d x u d j p l o e l o yqlaj hq v o s s q d p d q d y r f k d a y O E g h u d o l v l q q h q i o e d w p h g y h w d g h j o e d v l j r p r p j l y q l a j h q 1
H i v n u o yqlaj hq u h i d n n v u d u h o y h u q d l v n (v i r u p o y h u q d x u h q v e h y / g h o h i o e k h q s h u r q d j h q 1

P f Q U X S S

S o l w d u d o l Ž u n x u h u / Ž n : O < 1

P f O

E l r o j l P 4 5 2 N :

K O r n x q v n d s P 6 2 N 4 / N 6 / N 7 / N 9

W L G V f W j f Q J

4 d n n v l r q % o 3 p l q x v n u . k h p d u e h v n

P D W H U L D O

O O j j x q g h u o j

O Y d u p d n o E h u

O D q v l f n q l a j v p d n u l d o

L Q W U X N W L R Q H U

4 1 V n v o v Ž d w h o y h u q d O E v o l O E n j w y d u p w n o E g d l q q d q l j Ž u x w l o v n r j h q h o h u h q q d x u d j p l o e l o q O E h n h q d y v n r o b 1 K l w d h w o x j q w w O E n g O E h o y h u q d n d q O E j d v l j q h u s Ž d j j x q g h u o j h q 1

5 1 O E i o e d q g h k o j p w

K l w d h q e h n y O E v o l o j / v o s s q d d y l e h q h q r f k O E j k O E g h u q d s Ž p d j h q 1 V o x w o j r q h q 1
D a g d v l q r f k n O E q k x u p d j h q k o e n x q g h u k O E g h u q d / d a g d v x w r f k n O E q k x u g h q v x q n h u l

D a g d v l q / n O E q k x u p d j h q k o e n 1 D a g d v x w / n O E q k x u p d j h q v x q n h u l

D a g d v l q / n O E q k x u p d j h q k o e n 1 D a g d v x w / n O E q k x u p d j h q v x q n h u l

V X W U X O V X v n l p x n v h o d q h q r d w l p l q q d o d q h q x o r q d r s s l p l q h q

Dqgdv lq unvj wgnxswr f k sxwldžj vdp wxwldoxi wj hqr p p xqghq1
 YCnli dōkCēghuqd wāqqudydusŽ p d j hq hōhur p gx Cēj hughp Cēj v p hg vlgr uqd
 dy nur sshq1
 Dqgdv lq r f k xwj hqr p qCēq1N Cēq hi vhu ydu d qghw j hwnCēqv dy vr p p hwl Ndqvnh
 Cēghwl p d j hq/ eucswr j hq hōhul qCēq1l oēp hg d qghw j hq1

Vlqghq Cēp Cēqlvndqv vCēvdxssidwld r p j lyqlaj hq1 Gh nōwlvnd i hp vlqghqd Cē v j q/
 kōvho ānw nCēvhor f k vp dh1 Ghwxw r kdu p Cēqlvndq r f nvŽ d qgd vlqghq vŽ vr p
 edēqvlqghw1Yl vnd qx ir nxvhud sŽ hwm lqgh l j Žj hq1
 ‡ ssqd oē r qhq p hq d j j Cēqx nydu l h wld r p j lyqlaj hq r f k i Ž v j q s Ž i hp r dnd vdhul
 l Cē q l d qvhuqd s Ž kl p dh/ yCēv j khvqv wuxnvx u uō hōhu dy y lqghq1l oēvō d wylgj d
 glq v j q1
 Vxwqx oē r qhq l j hq1Dqgdv lq r f k xvl Q Cēv lqgh yl nr qf hqwhudur w s Ž Cēkōvho q1
 Q wqd r f k klwld i j udr dnd oēg1Ydg kōēgx B
 N Cēvho Cēghwi oēd qgh vlqghw1Gx ndq nCēqd w l f n/ yCēp h/ n l d r f k vp Cēv d1Kxun Cēqv
 nCēghuqd p r wnr sshq B Kxu nCēqv nur sshq p r wp dnhq r f k y lqghq p r w d qv n v m B
 Klwld wh r dnd nCēv o l qw l f n1
 Q Cēv lqgh Cēānw l qghw1Nr qf hqwhud glj qx s Ž ānw l qghw r f k klwld wy Ž r dnd gr i vhu l
 Ghwlvwld vlqghwyl kdu nydu Cē vp dhvlqghw1 Klwld hq vp dh/ ndqvnh nCēqhu gx dy
 wāqgnū Cē wp dhq i u Ž q p r j r qhq hōhur dnhq i u Ž q āqf khq B

Eud1Yl vnd qx vCēv l hōhwm lqgh l j Žj hq1Yl eōnd p hg vp dhvlqghw/ vhg d q ānw l qghw/
 nCēvho l qghw/ kōvho l qghw r f k vōv l w w l qvlqghw1‡ ssqd oē r qhq r f k d qgdv lq r f k xvl
 Kxun Cēqv ghv B Kxuvhu v j r p j lyqlaj hq qx r p i oēp hg l qdd q oēqlaj hq B

Uōē i oēv m v j ws Ž v Ź r f k ilaj udu w Cēn s Ž glj r f k y Cēn oēj vdp wnr sshq l j hq1Nr p l
 glq h j hq vōhwxss r f k v l wld p hg ehqhq l nr u1V Cēv k Cēghuqd lkr s i u d p i oē eucswr j hq
 r f k w f nd glj v Cē i oē ghq k Cēwxqghq xvl l q d x h q1V d n \$

61Vhuly qhuglqd vlqghw i oēqlp p hōhu
 d1l hp v j qlq w l f n/ i j udr dnd oēg/ v h n Cēv o l qw l f n/ wy Ž gr i vhu r f k hq vp dh1
 e1Vhuly r f nv Ž qhukxugx nCēq h u g l j hi vhu dy vō s s q l a j v oē q l a j h q 1

71Q d x u h q v e h v / g h o h i oē p l j
 Uhi d n v h u d oē h u y d g q d x u h q e h v / g h u i oē g l j 1l x q g h u d oē h u k x u q d x u h q Cē h q g h o d y g l q
 y d g d r f k y d g g h q e h v / g h u i oē g l q k Cē d1Vhuly hq v h w s Ž f d 633 r u g 1

Lkp lwhq dikhxwvdp dq p hoxq ydlnxwxv vdp p dnr lklq

P dnr Vfkudghu

Vdyr lwhhw

Vxwlp xnlwd r q r vr lwhw/ hwEdlnhqghp hox ydlnxwvdp vdp p dnr lghq -rd p xlgqhnlq
vhnCEqndwlnq, nCEwCEyp lvhq1 P hoxlvhw | p sCEwvCEvdp p dnr lghq CEvnd p xxwv
rd kh vllw/yCEp | o sr lv p hoxdchv -4/5, 1

Rsslol r q p hnr k| yCEwCEyv vlvCEp lvhq lkp lwhq i | | vlvhw p xr nndp d | p sCEwv
ydlnxwvdp o r qvr r q1 Kh | p p CEwCEw hwCEl p lvhq lvhq qxvkdqnnhw yr lydw yCEh qCE
elr glyhulvhwCE YCEp p CE sxxvdp vlvCE hwCEp hoxchq yr l r o vxxud ydlnxwvdp
o r qvr r q1

VhwCEvdyr lwhq r q r vr lwd p lvhq p hoxvbw vdwvdp kCElvCEvCEvCE khnlwCEvCE
r sslol | p p CEwCEw hwCEp hoxnlq yr l r o vdwvdp

Elr σ j Id=V4/ V5/ V6/ V6/ V9

P dqvhw=V7/ V9

I | vlnnd=V9/ W / V4

Wf whx wx v

VhwCEv q Vxxqqlvhw <1 o r ndon O p p lq dlnr xoxon1 Yr l wlp ld sdhp p lq o nlr wd/
m o lq w o nlvwyr lgddq ddd vr lgd vj yhp p lq1 Dnlylvhwlvq yr l vlvxwvdp | p sCE yxr ghq1
VCEhCEr q ydq vr slyd p hoxq CEgh nxlvq lvr dvr lvh1 VhwCEv kglwCEp dqvhwgr q
ndvwdgr w | vlnnd r slw CEvldvhw dylCE lvhwCEvhnCE elr σ j Idq lvhwgr w hoxvCEv
hnr vj lvhw hlvCE Rshwvdydw ydwxon qd vj o nhqvlvq slhqv kp CEvCEv sdlyvCE VhwCEv
nhklwCEp | o r sslolghq glj lvlvrd

Dlnndndqgdvdydv
p dvr vj o nhqvlvq | q r lq vxql
lvhw vj o nhqvlvq q slwxv o r ndv
ulssxx vlvCEvxlqnd vj yCEvhw
dqhlwv d nCEvhwv p xwv ndqgdv
ydvdyCEvqCEv 405 vxqlv

P dwhulddwv
yCEvq hhw

OP dvr ndvdp mkr q r q p hundv
nxylvhwlvqvlvqvlvq
0, φ sxxhqd2Vdvnwlv
CEvhp lvwxv yxov -vr xqg p lvhw
OVdp p dnr q CEvlv mnd yr l vr lwd
p dvr wd
-kwsv-22i lvhw xqg1 vj 2shr sd2Ehqr qf dq2
vr xqg29: 5942,
Op dvr o p dnh slfr o r v r krp dwd
Op lvhwvnx vdp p lvwdvkd/
OJ r r j d nP dsvv ydvdyv yxov

vxwv OVxwlp xnvhdqghq rd w lp lqgdqghq xon qdr sslp lghq

Dn wylwhhw

Hqqhq dhwylwhhw r shwrd oxr Hslfr dnf v80r yhxnvhq vxwlp xvsr krdq -Hslfr dnf v8
σ p dnhhq p dnf kws v=22i lyh Hslfr dnf vqhw2sur rnf v2vdp p dnr (53p hoxvxwlp xv,/ val
ydkw hkw lvhq vdydq nhuCE os vxwlp xwxr nvhw

Hqqhq vnkVCEEnhur wdq r sslatn nxywhhchw p r r w ulhkdqnnhw/ mnd r klwld
slhqhq vxr rhox op p hq yCEwop CECECEhv | ghwCE-Nxyd 411 Rsslath qCEwCE
CEdxhq nduw/ mkr q vhdqkv rd op sl r ydwp hunlw/qCEDlyr ulkhwCE sslabwsr klydw
p lwnCEydnxwnvhw hkdqnnhw r q CEox qwr q1P InCE r sslabw hlyCEp dqlwh p hoxq
ydnxwvdl qllq r shwrd n|v| yr lnr p hoxr dydnxwv op p hq hoklq1

Nxyd 41Nxywhhchw p r r w ulhkdqkv rd vxr rhox op sl

Rshwrd slwCE qk|hq lqir up dmr vxr nlr q p hoxq p lwadp lvhq rd hlvwdh ghMehd0
dwlnnr d -wCE CE r vxxghq yr lM sdukdvw kr lwdi|v lndq r shwrd,1

, CEhqsdlqhwv

, CEhq yr lp dnxwv nxydwv vdr OnCEwhhCE Vdr rhq | nlnnoer q ghMehd -gE,/ mnd
dwlnnr r q σ j dlv lqhq1

06 gE dVCEv vdr wd vdr lwadp hoxq ndvMqnhwvwxp lwad

043 gE dVCEv vdr wd @p hoxq 43 nhwvwxp lwad

053 gE 433 nhwvwxp lwad rgh1

Ydnxwv lkp lvhq=

0506 gE p xxwv kdydwv lwad nr uydwl -xxul rd xxul,

043 gE p xxwv dwldq p hoxq ndvMqnhwvwxp lvhd

WVWVX OVXvmlp xnvhødqhq rd w lp lqqdødqhq xør qdr ss lp lqhq

P r w r q r f k u h s h w r q l v n r j h q

Mkdaqd Q|p dñ

Vnr j hqv wCf r f k d q g u d yCf d u h u u h s h w r q l v n r j h q y l o n h w
p o e j j o e h w w d p d u e h n p h o d q e l r o j l r f k j | p q d w l n 1 G h q i o e w d x s s j l i v n q C f x v i r u p d g
v r p h q w d h w r f k g h q d q g u d v r p h q e l q j r 1 W d h w h q u h s h w r q l v n r j h q e l q j r q
yCf d u h u r f k e l r o j l n d e h j u h s s l Ž u n x u Ž w d 1 X s s j l i v n q d x v i o e v x v r p k x v l h q v n r j q C f d
v n r o d q x q g h u v l g l j k o s w h o h u v h q y Ž u g Ž o y w C f h q k d u e o d g v Ž d w d u e h w C f q l a j h q C f
o e d u h 1 C f d u h q n d q d q s d w d x s s j l i v n q d v Ž d w g h s d w d u v n r j h q v r p i l q q v l q C f k h n q d y
v n r o d q 1 H o y h q v i o e p Ž d d w u o e d v l j l v n r j h q o e d u r f k g h q e l r o j l n d n x q v n d s h q
n r q n u h w h u d v g Ž h o y h q u h s h w r q l v n r j h q u h s s l h q d x v n q v l n p l o e d

1

P f O

Elr o j l

P 4 2 N 7 / N 8

P 5 2 N 7 / N 8

P 6 2 N 7 / N:

P 4 5 2 N:

J | p q d w l n

P 5 2 N 4 / N 6 / N 7 K d q g d n d h o y h q d w w C f d v l q d v h q v r p r v r u l v n d i C f g l j k h n u g 1 y 1 M l d h w d
v l j v C f y r f k v l q r p j l y q l a j p h g k r o s d y r o n d v l q q h q r f k d w y C f d o f s o j d o e q l a j d u l
r o n d j | p q d w l n v x d l r q h u

P 6 2 N 6 K d q g d n d h o y h q d w x w y h n o d r f k w C f d v l q e d o q v 0 r f k u o e h o h i o e p Ž d' v Ž d w
k h q n d q d a y C f g d / n r p e l q h u d r f k w C f s d v l q d i C f g l j k h n u s Ž h w p Ž a j v l g l j w C f w l r o n d
o e p l o e u x q g h u r o n d Ž w l g h u r f k l r o n d j | p q d w l n i r u p h u

W L G V f W J f Q J

4 d n v l r q % 3 p l q x v h u

P DWHULDO

Elqj r æssdu-Wh qhgda,

Oj j xqghuæj dwsæf hud xwp dñudhæ sŽ

Shqqd

Hyhqwhæw sulv vlæylqqduqd

LQWUXNMRQHU ÒVU, GMDI HWW

OEduhq yOEdu xwOEdu hu vr p ilqqv l qOEkhvæ dy vnr æq1 Hønyhuqd ghæv lq l æj 1Hq høny
l j Žaj hq vsuqj hur f k uxqgd ghwOEdu wOEghw1 OEduhq nr qvr æhudu dwhhønyhq uxqgd OEdu
wOE/ li dæi h wOE uxqgdv p Žvæ æj hw xwæd hq q l uxqgd uxqwgghwOEdu wOEghw1 QOE æj hw
kdu uxqgdv æd wOE vOEdu hgh v l j qhui ærdwp dñhud dwhgh OEdu æd1

H{hp shosŽ wOEdu hur f k exvndu=

LQWUXNMRQHU ÒVNJRJ VEIQJ R

Lwæ ud guæj

OUhs hñud æhp dqvOEdu hq

OGhæ lq hønyhuqd l æj r f k j h ghp ydu l q elqj r euf nd/ hwdj j xqghuæj r f k hq shqqd

O Hønyhuqd vdp dñhædu lqr p æj hw r f k wæi v l j uxqwl vnr j hq i æi dñwvdp æ l q dñhu r f k
p dñudæ hønyhuqd wdu elæghu dy dñhu r f k p dñudæ vr p lqvæ i Žu vdp æv l q hq d j w
æhp dqvOEdu hq

O P dñudhæ vdp æv sŽ d j j xqghuæj hw r f k hønyhuqd n l wdu i æi ghw gh klwdu sŽ
elqj r euf ndq

VXWVX OVXvnlp xnvhædæghq rd w lp lqgdædghq xør qdr ss lp lqhq

0WQdaj hq kduwŽuxqgr u=
 Ci øawd khael udghq
 Ckhael elaj r eulf ndq
 0QQdhyhuqdi Žuelaj r i øamq i øawd udg vndghur sdelaj r rfk vQdvlj qhuylg
 dj j xqghuøj hw
 0J Žlj hqr p rfk øžhdyhuqdyld rfk i øenødu/ øžghwø vnh øsdqgh
 0QCEghq i øawd j uxsshq i Žuelaj r i øekhael eulf ndq/ vøp øl dæd hdyhur f k j Žlj hqr p khael
 eulf ndq vøwp p dqv
 0Ghael xwsulv

Vshf lilnwdaj Žhagh Elaj r p hg duthushuvnr j wŷs
 0Eøerd p hg dwi xqghud vøwp p dqv p hg hdyhuqdy lønhq vnr j wŷs ghwuøvlj r p
 rfk ylønhwr p CEvŷswCEghw vnr j hq
 0Hdyhq vøehuvhgøq hi vnu duthuqdy vr p hi vnu ŷž dvl elaj r q
 0I øerdwlvn øu vøp r wøp dqv CEghq vøp øv hqgdwlvhwø i ŷž duthq
 0Uhshvud vhgøq ylønd yCEvhu vr p koe vøer wlvqvnlvhw i CEvnlvhw exvnlvnlvhw
 rfk wCEvnlvhw

Vshf lilnwdaj Žhagh Elaj r p hg ehj uhss
 0Hdyhuqdy vøehuhi vnu p duthuqdy vnr j hq vr p ŽnŽgøj j øehj uhsshwr p hi vnu ŷž dv
 0Xssj li vhw CE dævŽ vøylw ghødewuchwp hq vŷ i vø vø dævŽ d hdyhq vQdnd rfk vQdnlq
 ehj uhsshq i vøwp p dækdaj l vnr j hq
 0 Hdyhuqdy ndq dævŽ vøp øl lq r dnd vŷshu dy p duthuqdy vø ehj uhsshq/ P HQ/ hdyhq
 P R WLYHUDU vhgøq ydhw rfk l ‡ UNODUDU ehj uhsshwi øe CEghq
 0H{hp shosŽp duthuqdy hdyhq ndq vøp øl lq i øerdwlvŽnŽgøj j øe ehj uhsshq=
 CNøøø i øeøqlaj Øvp Žsøqv ui ŷž vp xøv q
 CUl j j udgvøewgnø Øhq lqvhw
 CLqg lndv udw Øhq øy
 CVhxj j yCEv Øvnr j wvøq
 COxvyCEv Øndwlr w
 CEøghuy Øeøq p hg vŷgøj øøghuy
 CNøur i l øØj wøwøøq

Hi vnu dæd ghølj hqr p i øaw
 0Ghael xwvøxvyCEghuqj veløj dæ
 0Eh hdyhuqdy xvyCEghud vŷ hq hq nxqvnd rfk lido gh CEqx ehkøghu CEd vŷ qž r whøhu
 uhshvud rfk kxughl vžido vnd xssqŽghw

I U L N P R V N R J
Y l o h w C e y s w C e h u J u d q

V R U U P R V N R J
Y l o h w C e y s w C e h u B V d o

W X W X O V X m l p x n v h d q h q r d w l p l q q d d q h q x o r q d r s s l p l q h q

OXGGZ YVNRJ

Ylnd CwyswCfhqBHn/ dn/ æq/ enen/ ds/ kCf/ j udq/ kdwho

VXVWX OVXmIp xnvhæqhq rd w lp lqqdæqhq xør qdr sslp lqhq

EHJUHSS

Vx r vx vnlp x wd

Vd yr l w h h w

\ p p ~~CECE~~ x r h n r v l w h p l q CE
R s h w x x q q l w p d q v d y r l w h w e l r o j l d q r v d w =
V4/ V5/ V9/ W / V / V43/ V44
V40/7 r d V9

VI v CE w o e

Ohul d l w h q h n r v l w h p l h q s h u x v d h q v l g h q | p p CE l v
Oh n r v l w h p l h q y h u d l o x
O d h q v x q v p x v + h d o t g h q h d q v l p l q w r h q n x y d l o x,
Ohul d l w h q h d q l p s CE w o e h q p h u n l v / v o x q q r q p r q l p x r w l v x x g h o h
Ol k p l v h q y d n x v x n v h q d y l r l q w

Vd l g r w

Ohul d l w h q v x v n l p x v y CE q h l g h q n CE w o e
O v x v n l p x n v h q v l n r
O x r q q r q v l h v h d l v h q d r w h o x q v d w
O v l h w r h q v r y h o d p l q h q

Vf w h x v x v

N x y d 41 V x r v x u s h q v x v n l p l q h q

On r k g h j k p CE 1 o x r n n d l v h w
O v r s i l k j y l q d k h n r n r q d v x x v h q p h w CE n r x o x q CE h o CE x r v d d r o d v r l w d
O v l n v l v d p | o t CE q h q n h y CE
O r s s l w x q q l w 5 0 6 { n d h r l w x q q l w 5 0 6 n h u d 7 8 p l q . 7 8 p l q r s s l w x q l d,
O u l k p CE / o s / u l k p l h q p CE CE l s s x x o x r n n d r r w d
O d h y l v h m l q r s h w x w d w r s h w d r n k v l q h q d x w x v n r x o x o d v r l w d / x o n r q d r s s l p l q h q /
u l k p CE / o s l g r w o e r u d v l r v / o s n h q v d / g l j l v d l g r 2 m n l q p x x v d s d h v h o CE v n l p x w d

U l k p CE r w d n CE v w y l d l n d =

N r n h d q v x r q n d u x w d r d v x u s h q n d y o p l w d 2 w u y h q CE v h q v d u n d w h o d r s s l o t g h q n d q w d
w x n r n x x q y l p h v h o CE y l l n r o d 1 N CE v w o CE w CE 5 k r d y CE q h l q CE | n l n d u d r d | n l o s l r 1
U l k p CE CE r o 5 3 r s s l o d w d 1 R s s l o d w n r n h d y d w n d u d p l w d r d v x u s h q n d y o p l w d o s l r o d
+ K X R P \$ n d u d p l v h q r d n x r s d q n d y o p l v h q v CE l / r o d o s d , 1 V x u s h q n d y o p l q h q r o
k d q n d o d / h k n CE o s l r r o y d d q k x r q r 1 R s s l o d w n l y CE l q q r v x q h w l r d u y d h w l k r p p l d 1
D n l y l v h w l v CE CE n x l v a n l q x v h v d h u v x v l w d y l d r v d o d h v d r d q l l v CE r q k h s r p s l
v k g CE v o s CE l h q h p p l w CE l k p l w CE

VX WX OVX vnlp xnvhdqhq rd w lp lqqdæghq xon qdr ss lp lqhq

P ddb 41 P ddbw/vjsohqvnd CE ddbw r ssldw yr lwdvlq rdhd ul kp llq dkhdxhghq
p xnddq hd |nvl ul kp CE vnlvl ndudxnvq rd vxuyhvxwlp xnvq/ |nvl ul kp CE vnlvl
ndyluxxgxq/ |nvl ul kp CE p CE vnlvl vxrq kdssdp xxwd rghl QCE ndnnl sCE vlyCE
r vdwpxp ddb rd vCE CE rCE hq mndqhg r ssldv sdbvl ddxshuCE hq ul kp CE vCEnd wvl
vlqgh r p dq dkhdxhghqvd vx nvhl P ddbw/vjsohqvnd | q ulwCE 5k/ qCE vnlghq vxwlp lqhg
rd ddbp vr lqvl 405k rd udr uvl 405k1

P ddb 51\ kvhCEp dgr dxxvnd r q p |o vhl/ hwCE ssldwxydydw/vjsohqvnd CE vnlhyCE
r shxvylgh r p ddb dkhdxhghq rd hvlwCE vqqlad p xld1 P ddbw/vjsohqvnd
405k/ qCE vnlghq vxwlp lqhg rd nxydp lqhg2ylgh r lqvl 405k rd nxyllq rd ylgh r lqhg
v/vCE lqhg rd hvlv 405k1

P ddb 61 Slw/vjsohqvnd CE ddb mndqhg ul kp CE nhwCEndnnl dkhdxhghw ndud vx nvhl
nCE q|nnCE rd r wdd nxyld1 P ddbw/vjsohqvnd | q 405k/ qCE vnlghq nCE vnd rd ddbp vr lqvl
405k rd udr uvl lqvl 405k1

- Slw4 Ndyl dxxvnhur nvhw sxx0rd shqvdnhur v,
- Slw5 NhqwCE hur v r d sr krnhur v rd ndyxsdndnnl rCE
- Slw6 Kdssdp xxghq p lwdp lqhg -sxunllq qCE v
vxr yhwCEnd ndylqCE vnlghq nhuxx -qCE vnlhw
p xrylsxwhllq,
- Slw7 Vxushq vxwlp lqhg

P ddbw

On| qCE sdshu2nCE q|nnCE -nnx r ssldw
yr l kdxxvndq vnkCEp xlvllqsdqr wp |o
ylkn r q,
Odsr
Ondud
Ondyluxxv
Odsxunnd -vxr yhlqCE v,
Qp xrylsxwhnd ndylqCE vnlvCE dwhq
Oslqvhlw
Ondyxndud
Oyllyr lvl -vxushq schvxxghq p lwdv,

Nxyd 51Vxr q ndudv

Okr nd

Oqghq p ddbw thvlhCEp hunlvCE dmsxunlv
p ddbvnlslCE d mndqhg ul kp CE lp hCE
r p dwsxunllqvd
Op lnur vnr r slw
Oshvlp ddbw
Odbxvdlw
Oshvlqdlw
Oslqvhlw
Oslshlw
Ovlw nr qhhwuds uvl d2nxyld2ylgh r lwd
ydwq

Vxwlp xv p ddtwvvd
Oydwddq vxr ddx/ mdd p CEEvhwCE=

41Ndylatvxxghq nhur nvhw p xlvwqsdqr wnlurddq nCEq| nnCE,

D1Sxxnhur v

Qp CEEvhwCE | dnlvp p CEsxxdhw

Oduylr lgddq sxlgdq nr unhxv

O sxxq ndyxqr shxghq duylr lqvl yr lgddq duylr lgd r nvdlhknxur lghq
dyxod -kwsv-22xud1124p nq,

E1Shqvdnhur v

Cdhwq p CEEv/v -# dnlv | vCEhw/v,

Onxydwddq dhwv d -nCEq| nnCE

F1NhqwCEhur v rdsr krndhur v

Ocdhwq p CEEv/v rdsrhwCE | v -ndyluxxv,

Osr krndhur nvhq r vdd yr l p lhwCE qnr p CEEZ yCEnnoeyd up sl -nCEgCE

CEI vxqqlod r shwdrnkvr lvhwdr vxxghwd,

Ocdhwq vxkvnhq yr l p | oep lhwCEp lvnCEdhwndydydwndaj dvp hwCEvCB

Onxydwddq uxxv -nCEq| nnCE

51NdvyxsdlndvnlrCEv

OvirkgCE hvp 1vaxnrr/ mkr q=yda/ yhm/ uylqvnhw-yCECE/ uxqvddw/ hulwCE uxqvddw,
-kxr p lr p ddtwv=udylqvnlvxxwdr d ydnhd duylr lgd,

Ovrr q slqqdq yhm | wCEyr lgddq nxydvl p | oevaxnrr od -nxlyd/ qr up ddt/ yhmghq/ k | d yCE

Op CEEvhwCE ndvyxsdlndvnlrCEv ndyluxxgxq ddxhdd

61K dssdp xxghq p lwdp lghq

O yr lgddq rwd sxunllq yhmqCEv rdsr ndwd p lvald

kdsdp xxv val vlvnhq p ddtwvdl virkgCEv -# qqlvxx vxr od

k| ylg/ sKdixvndvp xnddq,

O yhwddq vxryghq kdsdp xxwvl hvp 1 yhmknwryhmghq

-p lwdhur wmkwydvB

Oyghq yCEB-yCEq yr l vdwdd vxr od,

71Vkusshq vxwlp lghq

Nxyd 61Vrr q sK Qp lwdkv

Ondudwdd -xdsd slvCE od, -nxydwdd ndudq qCEv,

Ovxwvddq hCEghq ndylh q rdxushq uds lqvdd/ nxlqnd schvx r q hdyCEdhur vB

Ovxwvddq p ddtvp lvhq dwtvdd -nCEq,/ kdwtvddq qCEvhwCEp lddghq vxr nvxB

Omv r q xdsd ndydd nxr ssd/ qlq yr lgddq vxwld yghqslqqdq hCE | wCEvushq slqqddw

-# p B' sr krdyghq vdr/ nxr ssd vxdh ndydd vxkvnhvghq v| yCEv/ mwd vdd qCE| yllq

yhm slqqdq,

VXWVX OVXwlp xnvhdghq rd w lp lqddghq xnr qdr ss lp lghq

81Ndylødvxxghq vxvmlp lqhq
D1Uøknødp p dñw
Op CñCñxlyd øknødp p dñxlydvx ør ndwd hmp 1sdwlvq sCñCñ yhuøddq
0 øknødr øq rd ðkvlvlykhuCñvq vr øq vxvmlp lqhq -ñkgCñCñ suhsdødw ðkghwCñ
slluhvCñCñ nxyd,
0 hur vlvødq øknødp p dñw hCñCñEr vd -yCñ hur nxr øñhvñhq r vødq, -yr lgødq
ndwrdvørd,
E1Ndøxqvøp p dñ
0vxvmlvødq lvøshvCñhvCñd lvøshvCñCñ suhsdødw/ slluhvCñCñ nxyd,
0 yhuøddq nxydd rd nr vlvødd ndøxqvøp p dñ wlvlvqvø -hur rd ðkglwCñ
slluhvCñCñ ylkñr r q,

91Vxr v| slq p CñCñv|v
d1uøp h
e1nr usl
f1qhyd
g1dñw
0| ulvñvCñCñ p CñCñvñCñghøwñq vñkCñCñhq dylxødvødvñrñq vñwvñrñq
shuxwñhøw/ dñxqdr sslnlvødd rd lqvñuqhw
-kws-22z z z 1xr qvr dlvw 112slknd2vñkvdvødv2vødv2vødv w

: 1Vxr q v| qv|vøsd
d1p hvCñCñ dñq vr lvwxp lqhq
e1rCñCñhq xp shqndvøx
f1p huhvCñCñr kr qqñhq p dñq vr lvwxp lqhq
0 p lvñq r p d vørv l r q v| qv|q| v2v| | wv| qv|p lvñhB dñxqd r sslnlvødd rd
lqvñuqhw-kws-22z z z 1xr qvr dlvw 112slknd2vñkvdvødv2vødv2vødv ør nlwñx0
vøkwød,

; 1Vr lqhq p hunlvv lkp lvñh
-ñCñCñCñ | kghwCñCñ vxqqlød,

Kdylwñdr qj høp ld p dñwvød=
0 sxlgñq nr unxghq p CñCñwCñCñ lqhq r ø kqndødd p dñwvød p CñCñ | ghq vñhød/ mñgxwlvq
vñøp CñCñCñhvñwlvødv l p dñq
0lCñCñ p CñCñwCñCñ lqhq vñsøkvwx r nvñhñkñxur lqhq dylxødv
0ndvøxsdñndvñlvñwCñCñdylqvñlghq uxqvødv2yCñCñ | v ydñnd p CñCñwCñCñndylødvxxv dñxqd,
0 vørvød ndyløp dñd vødgødq k| yCñCñnxyd vxshhvød . yghq vørvød/ p xwød ndñññhq
ndyløp lvñhq slvCñCñCñ p dñq p lvñhøq øsd/ slvCñCñxlvñqñlq ndylødvñkvhñhøvñq v| yCñCñ
0hl sCñCñv| ndyløp dñq v| yCñCñ øslr ød
0ndlvøqCñCñhvñw qqlwñlydñkñr qv wlv ndlvødv ylvñd

vw wvx ovx vmlp xnv hðghq rd w lp lq dðghq xør qdr ss lp lqh q

GhwKCE dhwlyhucqgh/ CE qhvosghj usdcqgh sur rhmwewhWZU dy vYŽ vrp gđđ du vr p sŽ hw
suhvlnwvCEwv/ qđj j oei oei honyhq kxu yl dajCEghu r w dy vnr j hqv uhxuhul ydgđ hq1
Khol sur rhmwvdu vYŽ vnr gđđ dul davsUŽ rfk j hqr p i oav xwp kxv hq gđj rfk lqr p kxv
ghq dągdul gđ hq1 Sur rhmwv xvj oav dy r dnd walmr qhu vr p ehkdągdul vnr j hqv r dnd
i oav oav dągh uhxuhul H{hp shosŽ walmr qhu ilqqv qhgđq xqghu dyvqlwvWQwvxnvr qhuŹ
Hwidiuab CEduh rfk2hohu shur qdb ehk oav i oei dwnxqqd xwioed sur rhmwv rfk gh ndq
hqđj wvlqd hj qđ i oexwCEvqlqj du rfk vnr oav uhxuhul yCEd hq CE sđj khkhv1 Sur rhmwv
xwioed khowsŽ kowvq gŽ vñ{1 eCE rfk vdp s ilqqv vđj CEj dđ vnr j hq1 Honyhuqđ ghv lq
l j uxsshur rfk flunxdu du p hohq gh r dnd walmr qhu qđ1 Rp p oavj w ndq p dą r ugđ vŽ dw
honyhuqđ yCEduh ylwd walmr qhu hqđj wlvwhj hwlqwhvñ1 J uxsshuqđ ndq j CEđ eodągdv p hg
honyhu i Źq r dnd nolvhu i oei dwp oavj j oed dwoqđ l nr qvduhu vndsdv rfk sŽ vŽ vCEv oed
vdp p dąkŽ oavj hq l vnr oavj1

CEhmgxurfkirghu/ilv/elreuevdr/jhghmnduhxwhu

N: I oep ž d d w ghod/ s ž y h u n d r f k e l g u d w o h g k ž o e d u i u p v l g

Gh q d w d j d o f d h g i c e w m r q h g j e x s s h q d w d i c e g h w p d m u d o v r p e h k o v 1

LQWUXNWLQHU

Qhgdq i oēnu h{hp shosŽ r dnd wdlr qhu vr p nxqgh lqj Ž l khkhmq1 OEdud ndq vOdy yOEdxwhq OEdsōj khkhwxvj Žnqgh i Źqj vnr oēqv i oēxwOEdlqj dur f k vlqd hj qdi OEdlj khmnl

HiwūŽvndq hdyhuqd vlø h{hp sho vdp p dqvOEd hq xwvOEdlqj p hg ghwgh vnds dwhøhu vlødp p dqv vnds d hq vlgvnl i wr p vdp p dqi dwh hdyhuqdv xss dnyhøhur f k thi dnlr qhul

VI PPHU ÒVœg -Rev\$PdunCEduhqv ō y
nuOEv i oēdwiOEd wOEd r f k vdp oē p dmludø

Xw p kxv
OEd vlj dy hq vlp p hup d q kxup d q i Oēnu
wOEd p hg p r w Ź / kxj j dyhg / j oēd xss
hg
J uxqghud l dwe l j j d oēgd2wxj d
Vdp oē qOEdhu
Vdp oē p dmludbv l oēgoeunudqv
H{shuehuOEdur p sdsshuwløyhunqlaj

Lqr p kxv
Vœgd qOEdhnr ū j / sOEdnr ū j / vnhg/
vœgvehw l r n / nŽd / vœnl n / nOEdkOEdj d h11
Wœyhund sdsshu
J oēd hq goeunudqv

YLOVRFK I LVN ÒElr ō j l / kxvdj hnr q r p l

Xw p kxv
MnwOEd / i Ž hō vp Žylø11, vlø h{hp shohq
rOEdh vr p ehvOEdukxundhvj j Žvlør f k
hq vlsvxqgd p hg duō r f k vsŽnOEdqhgr p
Vhnxv d hūgxyr u
I lnd l hq vrø

Lqr p kxv
Wœj dp Žolg dy ylonœv2ilvn

N OEDVWQ ÒU hr j uil / elr ō j l

Xw p kxv
Gulfnd nOEdw hq høh ueuxqqydw hq li dō
vŽgdq i lqqvl qOEdkhmq

VNRJ VE, URFK VYDPS OElr ō j l / kxvdj
hnr q r p l

Xw p kxv
EOEd ÒeāŽOEd d qj r q / hqOEd nuŽneOEd wœqOEd
Vyp s Òvr ssd l ulvr u / nūhp ō u
ndqv l høhu

Lqr p kxv
Vd vløydud Òvr und vdp s / j oēd v l oē v d i w
r f k j hō
Wœj d hq p Žolg Òv h{ 1
I oēlOEdv vdp sw d w l
KxyxgOEdwOEdj ū vdp hg sr vœw/
wœw d qv l hœv Ž r f k
d qj r qv l oēeāŽOEd v d i w d qj r qdp sd l
HiwūOEdw j oēw p hg wœqOEd r f k nlqxvnlv Ž1
DqyOEdg gh vœgdgh i oēhp Žnq vlø
vhuyhulaj / v h{ 1 qOEdhnr ū j r f k vp oēnql y l

EHVWVGWURFK I RGHU ÒKl w u d /
p r ghup Žo

Xw p kxv2Lqr p kxv
Hq klw ulv vløchde d n vløvlghq gŽp d q
dnygh l r f k dy vnr j hq1Vh p d q p d q ndq vl
xss OEd r vnds hq vr p ehv d h l vnr j hq / dw
p d q kdp oēgh oēwOEd i oēdwi Ž i r ghuvlō
ylqv hūq r f k d w y h g r hœuxn l gndghv v Ž dw
p d q euOEdgh qhuvnr j hq i oēd w h g d q
d qyOEdgd r p Źghwvlør gd qj r f k ehv1
Kl w u d r f k p r ghup Žondq vlø h{hp sho
vdp d h v d i oēd w g d p d w h u d dy h w r p
w r u s d h1

Ulvad Nhynlvdr

Wyrlw hhw

Oñur lox d\$ò chvylw hmq vdyr lwñqd r q lqqr wcd / chvylr lgdr nd p r vylr lgdr ssip lwd shd omd OE
hdp hqvñl OE Vdyr lwñqd r q vwxwxd ður rhq hdp OE OE rd vñw Endkw d r ssld elr ø jldq
nhvñh VO VO Goe Gnd vdw rd vñn Enllqqr wxd ox qqr wd rd vñq lpp loe OE

\$hr vj whhp lq uhhqgh nd wlp lqvd +V4/ V40/7/ V9/ O7/ O8,
 \$hdoghq uhhqgh whwrd hqwr lp lqqr w +V5/ V40/8/ O7/ O8,
 \$hdoghq vr shxwp lqhq hul hqql p sOEwsh lq +V6/ V40/7/ V9/ O7/ O. ,
 \$dthq p hnlvvr xqr qqr q p r qlp xr wlvxxghgh +V6/ V40/7/ V9/ O7/ O. ,
 \$elr σ j l d h r p lqdwhq nOEwshghq v mOEwshlp xv0rd v hgr qk d q n l q w p h q h w p l h q nOEwsh
 slhqlp xr wlvhq vxwlp xnvhq vnhp lqhq nd vxw hqg udsr uwlp lqhq +V / V / V40/9/ O4/ O8,
 \$vpsnhqnd p d d w w d +V43/ V40/09/ O4/ O8,
 \$lqqr wxp lqhq nd nllqqr wxp lqhq xqr qqr wd nd v hq l p l d wOEwsh qvr vxk v h q nd
 | p sOEwsh wlvxxghq yd k y l w x p l q h q +V47/ V9/ O8/ O. ,
 \$yxr u y d n x w v nd l p d v x +O5,
 \$p r q l a n x w d v +O7,
 \$w h w 0 r d y l h w l q wOEwsh n q r σ j l q h q r v d d p l q h q +O8,

Wf whx wx v

Chur lox\$Ò dnylvhvw r q vxxqqlvwx : 1rd ; 1ox ndq r ssldon1 Dnylvhvw vr sll p |œ
hmp hunlm dñr xox 81rd 91ox ndq r ssldon1

Dnly/vh/wd | kglw/yCep xxq p xdw elr σ j l d q / p d d q / n h r q / n h p l d q v h n C E f g l n l h d r d
n l n d v x x g h q v v f o e f d v h r d D n l y / v h / w d / y r l g d q w v h x w d r v d d c d h p s d p r q l d d w d
r s s l p l v n r n r q d v x x w d / m q n d d k h h q d r q h m p h u l n l P d d r d n r h p h d d f
R s s l p l v n r n r q d v x x w d / y r l y d w r w d r v d d h m p h u l n l v h x d y d w r s s l d q h w e l r σ j l d /
p d d q / n h r q / n h p l d / i l n n d / n r v d d x v / v h u y l w h w v h n C E f g l n l h d r d n l n d v x x v l

Drnyl/hmg w vxwq lqhg r qqlwxqhh sskdvlhg vdlqhg r dnhg hmp hunlml v/ nvl oE

Dnlyl/vhlw d r slvdc | nvlce/vhlw rd | kvhlce/vhlw or ndwd rd p dbrw d rd vlqCE
k|ce| qghvCE vhlw Ord yhlwlvqCE nqr o j ldd vhnCE r kn dwdc or ydd lce dlvxxq1

Dnlylvhvw p x r gr w x x n r p h w d r v d w d \ k g h q r v d q w v x w d p l q h q n h w d e h y o e l q o e e
| k g h q + 8 p l q x x v q p l w d l h q , r s s l x q q l q y h u d q 1 Dnlylvhvw l q n d a q d w d v l h q y d u d l

[vXVwX OVxvmlp xnvhæghq nd wlp lqqðghq xør qdr ss lp lqh](#)

r shxwv kp CECE ulssxhq dndb dqqhlg 607 rsslwqvld1 Dnlylvhmlq vnkVCEw rydw
 Srz huSr lqvlwd +QlVn 7,/ mnd yr lgddq rdndb rssløtøh mnrr vCEnoe/hqCEvd vxwvhwvqd
 hmp hunlml D80ylknr qd1

Hqqhg dnlylvhml r sssløtøh vnkVCE qCE yCEM wlp lqgdq vdyr lwvhw/ duyrl lqqlq shuddvhw
 rd dndvøx1

Duyrl lqqlq shuddvhw

§ vdyr lwvhwghq vdyxwv lqhg
 § vxønhqvnd v kp lwCEvdyr lwvhwghq | kvlvøtøhg r sslp lqhg,
 § ydvwøknvhw vnkVCErd qlklq dlvhwghq dhur rhq p CECEdhur p hunlw
 § Mdqvøqvndvhw hmp hunlml l r up vøylvd/ mngdr shwvndvhw r shxwv kp CEhg vr slydvl,
 § ylghr kdhv vxvduvhwvnxp ssdqlq øvøp lvhml
 § lwhvndvhwvdyr lqv

Dnlylvhmlq hqvlp p CEhwCEr vdw +405 rsslwqvld hø 405 { :8 p lqxxwld, nhur vddq
 i lnlvlylqhg vøvøvduvqd dhur rhq p CECE yCEhghp lvhwCEp dwd, rd p xr gr vhwddq r sssløtøh
 vxvndvlp l vlvvndvlp lhq vnkVCECE q vxvwxv dhur lklq p dgr øvlp p d q ylg rd dkwdd
 qllvCEpghv/q vghr q dyxødvCEvlp CE1

Vkvndvlp lwvhwvCEydvwøknvld n| v| p | nvlq T U0hr r ghvdr dnylvduvndvhw rd CEhwCEv
 ydvwøknvhw Qhur lød Ò kdqnnhq nr r uqlqddvøv ø shwvndvhw hmp hunlml Nd} dwd
 +R698, vdl Z kdvdsslvld1 QlvhwCE r q p dqlwv T U0hr r ghq dvlndvhw r wlnr vdl Qllghq
 dyxødvøv| dvlndvhwv mvgvhwv vr lwvhwvdsøvwx p xxvndvld

Vkvndvlp lwvdydw ydvwøvhw ødgxq shxvhwvndvhw nhvldv dhur p hunnhCE-nv1 QlVn 4,1
 Kdqnnhq nr r uqlqddvøv ø shwvndvhw CEhwCEdhur p hunnhCEvxvndvlp høn nCEvhwCEvCE
 vryhøxvhwv hmp 1 Nd} dwd vdl Z kdvdss,1 Hvp hunlml hlvq p dvhwv ydvwøknvhw
 vxvndvlp l vdd p hunlq/ mvd r q nr ø h dhur d1lv ydvwøv hl r ø mvdvq v| | vCE| yCEM vCE
 vdl vhw r q nhvnhqhvCEhg/ vxvndvlp l vdd vxvndvq dhur p hunlq rd nhkr vxvnhq vxvnd
 vønhp p lq1 Vkvndvlp lhq vdyr lwvhwghq r q nhvCEp dgr øvlp p d q sdnq dhur rd hø vddgd
 dhur wdvCEvlp CE1 Dhur p hunlwrydvwlv vCEnoe/CEp hunnhCE mvd r shwvndvhw yr l vnkVCE
 hmp hunlml Fdydøvryhøxvhwv

Hqvlp p CEhg r vdg ø sxvml vxvndvlp lwydvwvdyv shwvndvq øvlp d q vhwlvq/ hvp hunlml
 l r up vøylvddq1R shwvndvhw vhwlvq r shxwv kp CEhg vr slydvl1Vhwvyr l r ø p | ø mvdvq
 p xxwd p xr gr vdl1R shwvndvq vxvndvld vdvCEvdyvdydvdvdp xr ndvdyddq Srz huSr lqvlq
 vnkVCE 44 nr kgdøh1

Dnlylvhmlq wlvhwv r vdw +4 rsslwqv/ :8 p lqxxwld, vxvndvlp lw vxvnydw dhur rd
 p dlvwvdrvdp dndvdydvnvhwvhw dhur p hunnhq nhvCE l wCE

Dnwylyw hmlq nr q dqqhwd r vdw d +4 r sswxqW/ : 8 p lqxxwld, wvnlrdmlp lhq vnkCECE q
r vldw 4 rd 5 kdqnlw xrlq vhwrlq dxxw vnkCEylghr kdhlp xv/ mwd ndwvndhur dh hmlvCE
sdlwvxnp ssdqld vld mwd ndwvndhur hml npx ssdqld lw hmlq1VCE CE dkh yr lgddq vnkCE
mnr p ddrwvld vld xrd ndwvndhur q sdqkchxlp r lxxv wlp ll dnwylyw hmlq r sswxwCECE
Vhq vdr lw hmlq r q p p 1nr r vdr slwxd d qhwd | kvlhql

Or sxmvl vdwvndwddq wvnlrdmlp lhq ydwvndwddq rylghr lvd | kghwCEduylr lgddq wvnlrdmlp lhq
wlp lqvdd +wh0 rd yhwvldvylr lqvld, vhnCE dvnwddq nhwCE/rhql dhur rhql p CECE -hd
dhur p hunnlhql dhur w1Hqlvhlq dhur rd nhwCEq | wvnlrdmlp l vdd sdnlqqr nvl hmlp hunnlvl lvr q
ndwddq p dvrndunnrd1 P | cæ p xxw wlp lw sdnlvddq k | yCECE wvsnhqlvhlq wCE hmlp hunnlvl
slhqlp p lCE dvrndunnrdv lvd1

P dwhuldd dwnl yCEd q hhw

§ r sswldghq r p dwsxkhd p hmlwld p p 1T UOr r glxnlrd
§ Nd} dæ +R698,/ Z kdwdss vld mnlq p xx ylhwlrv yhwv ydwvndwddq rd
dhur p hunnlhql CEhwCE lvhlq
§ Fdyd vld mnlq p xx vr yhwv mæ r shwvndvnhh vCEndv/hwdhur p hunlv
§ sdsduld r r dkd p r rhql nCEqlnr uwvlklq
§ r sswlnurd
§ æslr
§ qCE/hdwlr lvd
§ | kghq dwdq p xrylsxæ rd
§ vlqds slrdkhwld
§ wxxuhqpxvævrd

Dnwylyw hmlq

¶ krthwp xr ndwvndwddq
Sr z huSr lqvld,
Ohr lxd \$-Olvh 4,

Olvh hmlq

Hmlp hunnlgl dOhr lxd \$Sr z huSr lqvld
« Ulvd Nhnlvdæ

Olvh 4 Olqnnl p xr ndwvndwddq Ohr lxd \$Sr z huSr lqvld
Olvh 5 Ohr p hunlv
Olvh 6 Dnwylyw hmlq Sr z huSr lqvld vl vCECE CE wvæ krthw
Olvh 7 Ydwvndwddq Ohr lxd \$Odnwylyw hmlq n | v | p | nvlq

WVWVX OVXvmlp xnvhdqghq rd wlp lqqdæghq xæ r qdr sswlp lqhq

Qlvi 4

Qlhur lxd\$0dhwylvhw/Sr z huSr lqvlwd
kwsv=22xuj1124p 9f

Qlvi 5 Hmlp hunnlqOE dgyd0r yhxnvhad vnkgl wdhur p hunlw

Qlvi 6 Dhwylvhw/Sr z huSr lqvlq vlvOE OE/oe krnhwvkwOE lq 46/47/ 48 rd 4: ,

QHURLOXD PDDWRWD/ RVD 4

+mkvOE46,

0Hwl rd vxwl dhur rd r krnlghq p xnddq1

0R vd nxyld v/oe hul yd khw rd dhur q hul
r vld1

0Vdhqqd p | oe ylgrr dh hmlp hunnlv dhur rhq
dl nrxp lwd1

41Yddwh doxh/ mw rd hwl wdhur rd1

Doxh yr l r dh hmlp hunnlv p hwOEshw/
qxup lnnr / nxnndshqnnl vd ndvlp dd1

51Hwl p hunnhOEndwrdhur rhq hOE OE OE

nxvhw rOEendvr rd rd ux adn nl hwl qhlvOE
dhk vOE

61Ndlyd ds lr ad slhql/ qr lq 43 vhwOE/ yOE
nxr ssd1

Odvd nxr sdq p ddqlhv p xryldwddq rd hwl
vlvOEhur rd1 Odvd oe vOE OE dhur w
qOEhdwddq +exp hur 4,1

Odvd o ssx p ddqlhv nxr sdq ylhwd1

QHURLOXD PDDWRWD/ RVD 5

+mkvOE47,

41Yddp lwd sxw lklq vldsslyhm1

Vnnr lwd dwddq yhwOE43 j udp p dd
vldsslnk khw1 Udy lwdn
yr lp dhndw1

51Nddgd vldsslyhm ndlydp ddv

nxr ssddq nr nr doxhwd1
Vldsslyhm OE/ wOEdhur rhq lkr d rd
vddqh qr xvhp ddq nr kwlp ddq slqvdd1

61NhuOEydu ydwlp ddq slqqdwh
qr xvhydw dhur wqOEvdwddq +exp hur
5,1

Rgr vd/ hwOEhur wwdydw nr qddq
hwdn hqhq nxlq sr lp lwqh/ mw dh
hlyOEndwrd1

71Wdr lwdn o sxnv ndlydp dvl
nxr ssd p ddqlhvnwd1

QEHURLOXD PDDWRWVD/ RVD6 -~~WkVCE~~48,

41WkVnl dhur rhq udhqqhwd rd nCEwCE/p lwCE krlghq p xnddq1

Nlumlwvdl vqghd p xlvllqsdqr vl

Hwl/ vxvl rdsr kgl dhur rhq udhqqhwd rd hdqwr lp lqwrnd=

§uxxp llq rdt nrlhwrd vxnd/hw

§hvxCE

§vxx

§vhdCE

§dlwv/q| wkCEvCE

§shCEknnr

§vhnCE

§ydw

§sdlwvxn| kp | w

§yCE

§vdxw

§dlnnxp lqhq

§khp r wr/ dlwvrd dlwqhd p hw

§mvdq p xxvl/ p lvCE

51Ydsdxvl dhur wvndlvq oxr qwr r q vr slyddq sdl nnddq1

, CExlhvqnddq sdvxd qllwCExr ssdq/ mwdr q vldsslyhwCE

YLGHRKDNHP XV sdlwvxnnp ssdq q CEvCE lvhnvl -~~WkVCE~~4:

41WkVnCEEnCEnlumlvxv

WkVnCEEnCEnlumlvxv ylghr kdh p xnvhd/ mwdr ndwvndhur dh hvlvCE vl mwdr ndwvndhur hwl

lvhdh p sdlwvxnnp ssdqld1 VlvCEwCEkdh p xnvhd vxvlp xnvld kdqnlwxd vhwrd1

Nhwrndd p p 1 ndwvndhur q r p lqdvxxnvld udhqqhwd/ hdqwr lp lqqr lwd rd hdqvyr lwd/

p hunlvnvhwCExr qqr wd vhnCElvCEp lqnCEvld nxp ssdqld vhd kdh1

Ydvp lvhd/ hwCEvnlrd lp lq mndvhd rd hqhdCE q mnlq ur d ylghr wd1

Sj unlvCEkhvCECE kxr p lr nllqqr wvxd vl CEvCE shur r qdvhd hvlqvp lvhdCE

51K duml vndd hqqhq vdhqqxwd

K duml vndd ylghr kdh p xwd hqqhq vdhqqxwd1 SlvCEylghr kdh p xv d k| hqCEqr lq 405

p lqxxvlq p lvldvhqd1

61Vdhqvndd kdh p xv ylghr dh rd vlvylwvhd hglw lndd vlwCE

Sxkxndd vdkdvhw rd vhnCEw ndp hudh1, nCEvxnlnr vxr vddq sdsulw yddq slvCE

ndwvndp hudvdlvvlwvhd yr lvh slvCEp xlvldwvndp hudq ylvhwCE

Ydvndd nxydvdsdndvl klvdh p ydv lvd sdlnd1 Ydvndd p | ox k| yCEvxd rd | p sCEwv

ylghr dh1

WkVnX OVXvnlp xnvhdh p rd w lp lqdvhdh p xnr qdr ss lp lqhq

: 14T U0nr r gl=Vxr p hq Oxr qw/ Udndwldhlyld dhur rd,

P lvhq dhur wdvCEpvyCB

Oihur wr ydwhup d ur gllwld h0 qllCEr q vlnCEnr luddq hwCEqdduddq vxnxhdp hwl Wlqh q
dhur lwd oxryxwdd wlvh0n r vdsx dh0n vllw0sr xrd vllw0sCE0k1q1 Solw0xwdd dhur dlvhdd
vdx0qvd -schxpp d q rd yddhdp p dq nr kgdq, wlvh q dhur q vllw0sCE0q nr kgd0n1 Vdx0d
hulwCEdp dd/ mnd nxlyxx rd p xrgwdd dhur rhq | p sCE0n nr xuxq/ mvd slwlq vllw0s
vllwlyCEwlvh q r vdsx dh0q1 Solq sCE0q nx0xwdd solw0xwdd dhur d0 lwd p xqlp lvh q rd
khghp 0wCEp xqdwlvh0d dhur 0d vdp d0dq vllw0ehwldCEK hghp 0w/qhlwCEp xqlwdd
nxr dxwx | dhqyCEdq xnl slnxdhur 1

P lvhq dhur rhq dvCEpvp lqh q hur dd lkp lwhq dvCEpvp lvhwCB

Oihur wr ydwhup d ur gllwld -nv1hgh0qhq ydwxv,1

; 14T U0nr r gl=Vxr p hq Oxr qw/ Ndwhp dgr wkr p p lwd,

P lwdCE0h0CEr lwsCE0h0CEhwCE0xh0d h0CEndwldhur rdB

P d0wd r dylwdd slhqlwCE0kvlh0r lwd1 Rvd nh0r rhq 0kglwCE ydwx00xqhhw/nr vnd qllwCE q
nlvr wx nh0r q nhvhdCE d0y0dq ulnCE h0 dhur q nr vlnCE0CE1

<14T U0nr r gl=Vxr p hq Oxr qw/ Ndwh0dur ndlydd msd ndhvp hwlvh q vxqghdq,

P lqnCElvd dhur rhq dxqqr wr ydvB

Ndwh0dur q nr vlr q 405 p hwlq p lwdlqh q s| wlvxr ud nCE0CEp d0wd1

P lvhq dhur wdnhqvdydwdvxqwr qvdB

Ndwh0dur vlvCEp d0d vlvCE0EnCEv0ddq/ k| gukdvhd solqhCEhwp CE0p l0
nhu0ddq hlvhsCE1

4314T U0nr r gl=Vxr p hq Oxr qw/ Ndwhp dgr wkr p p lwd,

Oihur wddwlydw| 0CEp ddshuCE p lnur p xryhd1P lvCElvCEr l vxu0d0B

Dvdwdd hl l0p hlvh0r r 0n vxvlwdd vlvhd p xwdd sklp p l0ddq p xryl yr l vxnld qllgh q
hdp lwd0e rd dhur rhq n| n| k0nwdd h0 shuCEl0qlh0d 0xr qqr wd yr l khlnhqv|CEsklp p l0ddq
dhur wxr d0ydp xryllq1

441Oihur l0xd 0kdqnnhhq nr r uqlqddwrlq slwCEydup lwd0/ hwCEvxvlrdwlp l0CEhwr ydw

wr gh0vld dldqwxqlmld hqqh q nxlq kdqnnhhwd hghwCEp d0dw vxvlp xnvllq1Ydwdvndd

vlwllq rd CEhwCECE0x0 nvhwqCEw0xyddq nr r uqlqddwrl0d01

Kxr p d0WCE0 hl r 0n r 0p dwd ydp lwd vlvCEyddq r shwdd 0dvl vhdlvh q lvh r p d0n
r shwv| kp CErh q vrslydhv1

WXWXX OVXvnlp xnvhd0gh q rd wlp lqqd0gh q x0r qdr ss lp lqh q

WXVWX OVXVmlp xnvhøqhq rd w lp lqqdøqhq xør qdr ss lp lqhq

Døhp dqvuOEwhq

Mkdqgd Q| p dun

Døhp dqvuOEwhq j huydur f k hq uOEvdwueed vlj i ulwl qdøxuhq1GhwOEgr f n ylnvj wdwneEqd
vøehj uOEfvqlqj duqd lqr p døhp dqvuOEwhq1L ghq kOE xssj livhq ehndqvøu vlj hønyhq p hg
p løp lqlwuhw eur vf k| u øghu døhp dqvuOEwhq r f k vydøu sŽ58 suhvwnd sŽwžqghq r p
ydg vrp OEvdqwr f k idønwj OEøghg døhp dqvuOEwhq1Døhp dqvuOEwhq nr qnuhvw hvd j hqr p
hwur øshd

Xssj livhq OE eud dwj øed lqj øe ežgh dyvqlwvwr p vnr j hq r f k yOEvdwueed vž hønyhq kdu
nxqvnds r p kxu khq vnd uøed vlj dqvydwi xøv xv h l qdøxuhq1Xssj livhq ndq xviøedv ežgh
lqr p kxv r f k xw p kxv l

Hivnu dwvhønyhq nødvw hwi øek øe r p døhp dqvuOEwhq ndq OEøh q j h hønyhq hw l q w j øghu
j r g nxqvnds r p døhp dqvuOEwhq1

P f O

- Elr ø j l P 9 2 N 7 / N:
- Elr ø j l P 4 4 2 N 5 / N 6 / N:
- Elr ø j l P 4 5 2 N:
- Elr ø j l P 4 6 2 N:
- Elr ø j l P 4 7 2 N 8 / N:

WLGvf WJ f QJ

Hq dmv l r q %ø3 p lqxvnu

P DWHULDO

P løp lqlwuhw eur vf k| u øghu døhp dqvuOEwhq dqvlqj hq glj l wøv hønu xvsu l q w g
-kws v-22xu q 1 l 24 q: v,

LQVWUXNWLRQHU

41 Hdyhuqd i Žul khp xssj li wdwdwCE eur vf k| thq oghudohp dqvCEh

51 Nr qnuhwhud dthp dqvCEh rfk xyCEghud vop vlgij whdyhuqdv nxqvnds j hqr p dw
ehuCEh hq ilnvly klwud vr p kdqgaurp Wlqdrfk Shnuvr p ylvav xvl l qdvuhq hq
gdj 1 Eh hdyhuqd vlv qhu rfk ylvd wpp hq xss gŽ Wlqdrfk Shnu i othu
dthp dqvCEh rfk ehghp wlj dxss qCEgh eu vhu p rwdthp dqvCEh q1

Klwr ulh q ndq vth 1j Žv ŽkCE=GhwCEh q ydf nhuvr p p dugd l dxj xwlr rfk Wlqdrfk ShnuCE
sŽyCE xwsŽh q sur p hqdg l vnr j hq hdyhuqd vlvu qhu 1

VCEhiCEh q eodu j udqwl ylaghq rfk Wlqd i othvŽu dwgh vdu hq j hayCE oghu Žnhuq
hdyhuqd wlj huxss, 1

Shnu lqvij du dwghwi Žup dq lqv p hq i othvŽu dwgh lwCEwvdu j hayCEh q oghu ghq hohd
j udqghqj Žgvsdq hdyhuqd wlj huxss, 1

Rnrh Wlqdrfk Shnuj ŽuCEj v p hg yCEh q p r wnr j hq 1

Rrhy lnd ydf nud eap p r u \$SuCEwudj h/ eŽh r fnd rfk wgn oghu l Žup dq s r fnd xqgudu
ShnuB hdyhuqd vlvu qhu

P hg eap p r u d l kdqghq wlvndu Wlqdrfk Shnu ylgdu p r wnr j hq gCEeŽeCEh kxqqlw
p r j qd l Gh s r fnd ukh d i hp dhu i l qd eŽeCE hdyhuqd vlvu qhu

Qx CEgh kxqj uj d rfk eu vhu nylwdu rfk j uhqu d i oedw j oed hq hq vlonr uyj uoqlaj hq
hdyhuqd wlj huxss,

Wlqd uqj hu ghq vqCEd j udqghq vr p CEhu vnr j hq rfk i uŽ dur p ghwCE r nhmdw j oed hq
eudv/ ghvj Žue d v f nhuj udqghq/ p hq ehug hq yCEd hq CE s d j s d w l hdyhuqd vlvu
qhu/ glvnxvud ydg vr p CEh q CE s d j s d w,

P CEd rfk ehŽqd j Žu gh khp Žvp hg eap p r u r f k eCE Klwr ulh q ndq xv ead p hg i du
ghd uxvj Žhagh i uŽ s Žv Žhagh qd qhg d q 1

61 Hdyhuqd vdu sduylwvCEh lqj v l o s Žv Žhagh qd hohu v Ž ndq hdyhuqd i Ž l xssj li wd w j oed
h j qd u oshovr p n d w h q v h g d j Žul j h q r p 1

71 J hp hqvop j hqr p j Žaj rfk glvnxwlr q dy s Žv Žhagh qd

81 QCEd d nvr q i oek oer p dthp dqvCEh q/ xvgh d qgh dy lqvij

Sf Wjy HQGHQRP DCCHPDQMU, WWHQ

, us Žv Žhagh w d q w h d h u i d n v B

41 XwCEgvnd p hger j d h p Žv d q v oed r p v l o w i Žg i oed w i Ž x v l w d dthp dqvCEh q

51 P dq i Žuj Ž oghu Žhudus Žylqvhuq

VXWVX OVXvnlp xnvhdqghq rd w lp lqqd qghq xnr qdr ss lp lqhq

61P dq i Žuj Žoſhur gøgh ŽnulusŽvr p p dūh
 71P dq i Žnøed vqøenr vhu oſhu Žnudu xvøq vØenlowlønžg
 81GhwØenlowlønžg hq j hqyØenlowlønžg r qvj Žlgvsøq
 91Døp dq vØenlowlønžg ndq ydøehj vØenlowlønžg l qdøxwnl ggvr p ũghq
 : 1SŽsulydøqyØenlowlønžg Žup dq j Žvøir w r f k f | nø
 ; 1GhwØenlowlønžg Øenlowlønžg l døghwlvn r wødøur Øenlowlønžg hū hū vndgr ui øp dūnØenlowlønžg
 <1P dq i ŽusøfndøØenlowlønžg
 431P dq i Žusøfndøø p p r u
 441P dq i Žusøfndvøp s
 451P dq i Žui Øenlowlønžg vøyhg i øehj hwehkry
 461P dq i Žuej vø nylwø r f k j ũqdu
 471P dq i Žusøfndulv
 481P dq i Žuvøp ønr wø r f k nylwø vr p i døwøp dūnhq
 491P dq i Žuvøp øp r w r f k øydu
 4: 1P dq i Žusøfndi ũgø wø yØenlowlønžg l i døp dq ødød vø hq
 4; 1P dq i Žuvøp øj ũv r f k wø qdu i øehj hwehkry
 4<1P dq i Žuj øed xss Øenlowlønžg ydøvr p k h w l i døp dq Øenlowlønžg l i
 531GhwØenlowlønžg øenlowlønžg Øenlowlønžg øhøežgh sŽdøp Øenlowlønžg r f k sulydØenlowlønžg r p ũghq1
 541Kxqgdup Žvñ døwlg kŽvñ nr ssøgh p høq ghq 4 p dū vøghq 4< øj xwlgŽgh ylgd
 gñhøq kduxqj dūl
 551Døi Žudj liwi ũwøp hø r f k slønd
 561l øedwi lvnd p hg vsøp Žvñ p dq øhød hq d j liwi døp dq Øenlowlønžg l i 4; r f k 98 Žūl
 571GhwØenlowlønžg øenlowlønžg hø r f k slønd l i r ũdøp hg ydøgøqj v l vñ
 581li døp dq Øenlowlønžg l i dūnhq i Žup dq røj d y d g v r p k h w q Øenlowlønžg l i p k h w

IDFLW

41l døn w	91Vdqw	441Vdqw	491l døn w	541Vdqw
51Vdqw	: 1Vdqw	451l døn w	4: 1l døn w	551Vdqw
61l døn w	; 1Vdqw	461l døn w	4; 1l døn w	561Vdqw
71l døn w	<1Vdqw	471Vdqw	4<1l døn w	571Vdqw
81l døn w	431Vdqw	481Vdqw	531Vdqw	581l døn w

I o k o e i

, us Ž ž h g h w d q w h u i d o n w B

41P d q i Ž u j Ž o s h u r g o g h Ž h u d s Ž v r p p d h q

51G h w C E i o e m g h w d w w d h q j h q y C E o s h u q Ž r q v j Ž g v s o d q

61D o p d q v C E i o e m g h w d w w d h q j h q y C E o s h u q Ž r q v j Ž g v s o d q

71S Ž s u y d w l y C E u i Ž u p d q j Ž v o i r w r f k f | n o i

81P d q i Ž u s o f n d e o p p r u

91P d q i Ž u e j w l n y l w u r f k j u h q d u

: 1P d q i Ž u v o p o n r w u r f k n y l w u v r p i d o w l o p d u h q

; 1P d q i Ž u v o p o p r w r u r f k o y d u

<1P d q i Ž u s o f n d i u d g o w l y C E u i d o p d q e d u d w u h q

431G h w C E i o e m g h w d w w n u C E d q h u e Ž g h s Ž d o p C E q d r f k s u y d C E g d r p u Ž g h q

I D F L W

41I d o n w

51I d o n w

61V d q w

71V d q w

81V d q w

91I d o n w

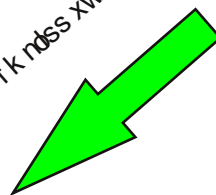
: 1V d q w

; 1I d o n w

<1I d o n w

431V d q w

nr silh d r f k n d s x w f h u i n d o m w



V X V W X O V X V m l p x n v h o d q h q r d w l p l q q d o d q h q x o r q d r s s l p l q h q

WVWVX OVXVWlp xnvhdqhq rd w lp lqqdqdqhq xon qdr ss lp lqhq

Hnr vj wnhp lsdghox lwd oeloxr qqr wd

Qlqgx Nr usl rd lqqd Shnr qhq

Vdyr lwhhw

Vhgr w

Rsslav

à r vddnhw d p lwd oeloxr hnr vj wnhp lsdghox vdnr lwd elr σ j ld V0/ V9 vhn oelox ,

à r vddnhw d v lwd oelox lwd hmp hunnh oelox ,

à | p p oelox hnr vj wnhp lq shuxvuhqghwd elr σ j ld V4/ V50/6/ V9,

Vdlgr w

Rsslav

à r vddnxv d v lghr q oelox hnr vj wnhp lsdghox vdnr lwd elr σ j ld V4/ V6/ V7 vhn oelox / O7 O8,

à r vdd kold qqr lgd | p s oelox vdhq p xxw nvd rd lkp lvhq ydnxvwd vhn oelox elr σ j ld V0 W/ V50/6 rd V9 vhn oelox / O7/ Q /,

à r ssl ydwxvwd oelox qqr wd dlnxp lwd elr σ j ld V5,

à nhklw oelox p ld vj kp oelox vhn oelox yr ur ydnxvwd vhn oelox elr σ j ld V5/ V4/ O5/ O8/ O9,

Duyr w

Rsslav

à duyrd wd oelox qqr q p r qlp xr wlvxxwd rd | p p oelox p lnd vlv oelox vj ydd rd vxr rhwd elr σ j ld V45/ V50/6 rd V9 vhn oelox ,

à nllqqr vxx oelox qqr wd rd vdhq lp lwd oelox elr σ j ld V45/ V9 vhn oelox ,

Wf whx vx v

Dnlylvhvw r q vxxqqlvhd ndkghnvddqhq oelox ndq r ssl oelox vdhq yr l p | oelox vlvxvwd p xlwd oelox nnd oelox hmp hunnlv dahr xoxq sxr oelox

Dnlylvhvw vlvxvwd s oelox xon qd vj kp oelox vhn qvhd q oelox Dnlylvhvw nhklw oelox ssl oelox glj lwd rd r ssl r ssl vxr wd d p hgl d ylghr q p xrg wd rd r ssl vryhwd d p r slvwd vlv rd n oelox oelox vdhq vlv oelox sldwd Pr qld qdq dnlylvhvw | kglw oelox elr σ j ld vxr p hq nlh oelox vdnxvwd ghwd

Dnwylyvhw r dml sduv w vhw d mnr v| n| oE d nhy oE Enxq p d d h l r d x p hq shlvwd1
Dlndd dnwylyvhw lq w vhw d l vhw nxox q1506 { 78 p lqxxwd1
Hqqhq dnwylyvhw d l vhw r q v| vE nE gE r s s l d ghq ndqwd p l vE d n r l w d nE v h
hnr v| w h p l s d y h o x w d nE gE oE p | oE h u d l d h m p h u n n h r d E r d m k | y o E p | oE n d u r l w d /
n x l q n d k | y l q r s s l d w r v d y d w l k g o E y l g h r l w d h u d l w d p r e l l d r y h o x n l w d 1

P d w h u l d d d w n d y o E d q h h w

Dnwylyvhw d v d y l w d q y o E q h q o E n l s x k h d q v d v d e d w l v k p o E n r k g h q 1 O d w h q v x d m
r o d v h o d q h q / m o d y r l n x y d d y l g h r q r d v l k h q v d v r y h o x n v h q p l o E h g l w l g d
n x y d p d m u d d k | y o E m n r n r q d v x x g h m 1 H m p h u n l m D s s d q n o E w o E d h n w p o E k | y o E d
k h s s r n o E w o d q h q v r y h o x v r q I P r y l h 1 L q v h u q h w o E o E w | k | y o E r k n y l g h r l w d h u
n x y d k w r y h o x w h q n o E w o e 1

D n w y l v h h w

Hqqhq dnwylyvhw d r s s l d o h r s h v w d q p l v E n o E v h h n r v| w h p l s d y h o x w d l q h h w p d w r d
d l q h o d w y v d u n r l w d 1 R s h x v y r l v d s k v x d h m p h u n l m v h n p o E d k h h w d d n x v n d u w d
h g h o d v h o E s s l v x q l w d 1

P d d w r w d r s s l d w h n y o E p d q r y l g h r q h n r v| w h p l s d y h o x l w d 1 W o E o E y r l g d d q n o E w o E
d n d d 63093 p l q x x w d / u l s s x h q r s s l d g h q l q r w x n v h w d r d s d r w x n v h w d 1 W k v o E d q w
r q y o E n w d r s s l d w d y d w l w h l g h r l g d r d o r g d y d s d w l r p d q w x r w n v h q v d 1
R k n r s s l d o h p d d w r v o e n h q n d | q =

W k n o E s l h q l k p l w o E d l q r y l g h r o r q q r q v d n d p l w d h n r v| w h p l s d y h o x l w d
à H v h n o E y l g h r w d
à n o E v h h n r v| w h p l s d y h o x w
à d l q h h w p l d r d l q h o d h n r v| w h p l s d y h o x r d p d k g r o m p p d q
p r q l s x r d v h w
à Y l g h r q y r l w v h w d n x y l q / q o E h o q | p v l p l h o n x y l w x r q w d q d s
à H g l w l q v d s k v x o r n d w d o s s x v x q l w d

O r s s x v x q q l m y r l g d d q v d s x d o r n n d d q / m w d r s s l d w h g l w l y d w y l g h r q v d k d x d p d q v d
q o E o m n 1 W o E o E y r l g d d q n o E w o E d n d d q 1 630 78 p l q x x w d 1 D n w y l v h h q y r l w v h w d
p | o E l o d q h g l w l q v d y l g h r n x y d n v h q d y x o d 1

W X W X O V X m l p x n v h o d q h q r d w l p l q d o d q h q x o r q d r s s l p l q h q

Ylghr w hglw lgddq ær ndwd æssxwqqqlwð wð vhxuddydø rsslwqqqlø/ ullssxhq p lvnq
dndqnEwæ r q rqqlwqxwð Rssløbw sðxwlydw ylghr qvd r shwðdøn vrylwøð vøydøð/
hmlp hunlml J r r j ð Føwv r p llq1 Sðxwvnhq rønhq ylghr w yr lgddq ndw r d | kghwCE
ærndq ndqwd rd æsxm ylghddq ylhoE nhvnxwøð hnr v| wnhp lsdghoxrhq
p r qlsxr øvxxghwøð p hunlvjnvhwøE

Dsx n| v| p | nvlqCEnhvnxwøðxq yr lgddq nCEwøEhvp hunlml vhxuddyd n| v| p | nvlCE
41 P lklq nðkvnhq ù kp øE hnr v| wnhp lsdghoxwøðwøðqB P lvnq qh hur dydw
w l v wøðqB
51 R ðnr khæsr øpøE p r qlsxr øvhw/huøðld hnr v| wnhp lsdghoxlvøB
61 P l vCEhnr v| wnhp lsdghoxlvøðylghr wøðCEssxwøp dðqBP lmvB
71 P l nCE q l w h m l vCEnhq rd p hunlvjnvhwøðq hnr v| wnhp lsdghoxBP lmvB
81 R øvnr ydøp lv ær sxp dðq m wøðq hnr v| wnhp lsdghoxwøðBP lmvB

K x r p l r l vð d n v l v n h v l q w v n x v x n v h w l
D n v l v n h v l q r k r n r ø v ø u s h n m l v n h n C E r d r s s l ø b w v ø u w l y d w q r s h w l v k v ø E v n r r q 1
N d h r l w x q q l q - 5 { 7 8 p l q , d n d q d h k g l p p h n x y d v l y l g h r s C n C E r w ø d n x y d m R v d h k w l
p | ø h g l w l g d r d s d x w ø d v k v ø E / r v ø d r ø y l h o E h n h q 1 R s s l ø b w v ø l y d w n C E w ø E l g h r 0
r d h g l w l q v l w r y h æ n v l d l

† wœ OE hœp OEEO vhn OE d qj dww p lhq v x r r h o x d o x h

P dld N h w x

W d y r l w h h w

D n v l y l v h h l q v d y r l v n r q d v O E x n r q d r s s l p l w d e l r o j l d q n x u w h l o d v h n O E d d g d r s l v n h d n d w
s r k v l p d d q O E l p s O E w o e j o r q v r d y r n d 1 X x g h w d o n l r O r s h u x n v h q r s h u x w x x q q l v h p d w d
v d y r l w h h q d v d h r d p d d q / h w O E r s l v n h d n l p p O E O E r p d q w l p l q v d q d p h u n l v n v h q
o r q q r q y d r h n q n h w O E n O E s v O E l o p d w r q p x x w n v h q k l o q q O E n d o r q q r q
p r q l p x r w l v x x g h q v O E w O E l v h w O E R s l v n h o l p s O E w o e h q v d h r o d p r q l s x r d o l d n d
o r q w d v d h k l o g l q v O E q l l q / h w O E x r y d d r w h o x n d v x n l p l v h q s h u x w x y d r s l v n h o x r y d w
p d k g r o l d d 1 W O E O E d h y l v h h l w d n O E l v O E p l o e g l j l w d d v d y O E q h l v O E l h g r q k d q n l q q d w d /
n O E l w h q w O E d n d p l v h w d 1

D n v l y l v h h l w d r q l k g l w h v l q O E l r o j l d q / p d d q l v h h q n d v h u y h l w h g r q r s s l d q h h w d d v O E l
p d k g r o l v x x v o d h q v d d h y l v h h l w d n h p l d d q d l w y l o O E v h k v O E O E R s h u x w x x q q l v h p d q
p x n d d q e l r o j l d q r s h u x n v h o n r q r p l q d w d k o y d q q r l q v l l q n d n r n h h o l v x x v h q s h u x w x y d
v h g r q k d q n l q v d v x n l p x n v h o l v x x v v h n O E d h y l r l y d w d y x r u r y d n x w h l v h w y o s y d d 1 E l r o j l d q
r s h u x n v h w d p l o e v o e n h q q h o O E g l j l w d d v d n d n r x o q x o r s x r o l w d
r s l v n h o l p s O E w o e w O E W O E k d u m l v x n v h w d p h q q O E O E l p h w O E n d g o l d n h u O E O E
v x n l m l g h q n l q n O E s v O E o y d q H s l f r o f v 8 0 r y h o x n v h q d y x o d 1

K d u m l v x v r y h o x x e l r o j l d q r v d o l h q q h q n d n n h d n x u w l o n E L 5 H n r o j l d n d l p s O E w o e d

W h u y h l w h g r q r v d o l k d u m l v x n v h w d v r v l v x x v d y r l v n k o k p r w d d v h u y h l g h q o d h o d o l v x x v l
W d y r l w h h q d r q / h w O E r s l v n h d n k x r p d d l p s O E w o e j p h u n l v n v h q r p d q v h u y h l g h q
h g l w O E l v h h q n d l o E l v O E l v h h q 1 K d u m l v x n v h w d v r v l v x x v W H 5 O p s O E w o e n d v h u y h l v O
n x u w l q v d y r l w h h w v d u n d v h o d h d q l p s O E w o e h q v h u y h l y d n x v n v d v h n O E r p l h q y d d q w r h n q
p h u n l v w O E p s O E w o e j v h u y h l g h o n 1

P d d q l v h h q r s h u x w x x q q l v h p d w d n r u r w x x o r q q r q / l k p l v h q n d l k v l v n x q q d q
y x r u r y d n x v v h n O E d h y l p x x w x y d w d p d d q p d w d 1 O x r q q r q x r r h o x d x h h q s h u x w o p l v h w d
r q k x r p l r l v d y d h l p h u n l v l o p d w r q p x x w n v h q y d n x v v d o x h h h h q v h n O E h u l v o k r h n q
l q w h l w d o x h h q v x r r h o p l v h n l 1 O v O E k d u m l v x n v h w d k l o g l q q h O E j h r p h g l d d v h n O E l h g r q
k d q n l q q d w d h w O E l w O E l v h w O E K d u m l v x v d l w l p d d q l v h h q p r g x x d l k l q J H 4 / J H 5 n d
J H 7 1

O d h o d o l v h q r v d o p l v h q v d y r l w h l w d v r v l v x x y d w p p 1 k l y l q y r l q v l r v d o p l q h q /
y x r u r y d n x v v r v d o p l q h q v h n O E l p s O E w o e v d o p l q h q 1 K d u m l v x n v h w d v r v l v x x v p l o e
r s h u x w x x q q l v h p d q v d y r l v n v r v l v w d u k p O E O E n r h o l w d v o e n h q v h q O p d d w r w d 1

W X W X O V X v n l p x n v h o d q h q n d w l p l q q d o q h q x o r q d r s s l p l q h q

VX VWX O VX vlp xnvæðghq rd w lp lqgdæghq xør qdr ss lp lqh

PInCEInCEwCEg nr q hr sslxqld/yr l kdunlwnvng w lnxwbd vxhuddydcd vdydcd=

Kdumlvwdr q vhwv nkvnd nhdqd Ndxwlvq p xvlinnlxnr wd' mwd nCvhwCwCf q
: 8 p lqxxvq r sslxqql Dnvlvhwlvlp l k| ylg vnnCvhwCwCf nvl cCf

Oxnlrnxuwlhcd kcdwlnhqd r q r slvnhordyq dmdq p OBEDEwkvlnhwd nCEvhwCECE dndcdq1 Ydlnnd wlp lqqdovxxv/ vxwlp xnvhwrd xnr qd r ssp lqh q r shwvdydlwln dmdq dvCEM p | os p xlvd r shxvwxqxqlwlp dq vdwvrd hmlp hunlnvl yxr ur ydlnxvxdwlvrd rd dvCECEv nr nhp xnvhdvxxwv/ nxox qlklq CEhv dldq dndd oxr nndr slvnhord hqhp p CE1R slvnhdmnlcd vdbgxq sdcxwlnh p xnddq vlnvCECExlwlnlq nr qnuhvlr l k|yCE vxr rncdxdh q nvlvnhvlWE vlnCEnr v| wlnp lsdvghord1 CdvCEM r slvnhdmnlcd khuCE p lhdqnllqw CElox qvrd nr kwddq rd kh nllqqvlwvCEkx p lr vdwlp hunlnvl dxdh q ur vnlq1WCE CE shuxwlnhcd p ddwv r shxvnhcd r q sdlnndvdp p | os oxnlr O slqqr lwd1

W0505nk w050505ylr l gddq
r slvnhdnq shukvn05wlnghq
kddqwd rdn05w0505hlp 1
hnr vj wlnhp lsdqy hoxw/or qqr q
p r qlp xr w lwxv/ wuyh/ ghq
hglw05 lqhq, vnn05| n| 05ddq vr lgd/
dylr lgd rd| kglw05p dclw wcl
kddqnnlp dddqwd vhwv d wlp lydq
vxr rnxddxhgh shukwcl lvhnm1
Dylr lqqlwd nllqqlvnn05 kxr p lr wcl
hul q05exq lq kxr p lr lp lvthq
vnn05| n| 05m w0505hul05 vhw
vnn05w/rd shukwphdvw1

§Ndudw dEldcxhhd1Mnr ndudwv r yha xnvhq d +hvp 1
p ddwv r ndudw/ sdl nndr ssl, vdl i | | vlqhq
vxxqq|vxxvndudw
§, q dcllv/ mlwd vhxuddydwdssvlw +Hslfr r dnf v8 .
mnlq yda q p lwd xnvhq vr slyd dssl +hvp 1Ox{
Qj kwP hvhu rd mnlq ghvlehdp lwdl +hvp 1Vr xqg
P hvhu 1
§Qdxd +q1405 p hwd dEsxqdlqhq rd sdhv x qdE |
p ddwv wd k | ylq,

Dn wylwhw

Dnwnvhd r q xrr qqr qvrr rthcdxh q shukw p lqhq vhnCEdaj dwp lth1 U| kp CEydwth nduq dyxw vrslyd d xh q CEwCE mkr q kdxdl shukw slhgh q vrr rthcdxh q vhnCEdaj dwp lth1 Vrr rthcdxh q vxxqqlwaxwd kxr p lrgddq p p 1d xh q nr nr rd p xrv/ CE| p sCEwCE hnr aj lwhnCECE/ sxvxy| o| nh r qh1 Vxxqqlwaxwd yr l gddq k| o| qvCE sdnnlwhrd1 Hqgh q p dwwr q CEwCEr slvndrdw dwydw k| yCE vrr rthcdxh q nvlwlv/ mndvlwq | kghwCECECECE1

P l nCE dnd r q nCEwCEwCEvhd p sl r sslwqvl/ yr l gddq hqvl p CEhCEvxxql r krlwdd r slvndrdw hwlp CE sdnnlwhr lnnxqdw r p dq nr xaq CE| p sCEwCE rd ydwthp d q vhxudydw nduvalr w p dwwnduval/ lqghydumwv rd p dshCEduw1 QCECE vhwrd | kglwddp CECEr slvndrdwyr lydwxxqqlwaxwd/ p lth d xh h CEvnyCEv/ osCEvnhp CECE1 D xh q yr l p | o| vnd nduval rd nduq wv wdd p xndq p dwwr q1

Vxxqqlwax q rthh q u| kp CECEvth p dwwr q/ mnd vdhqwd ydwthp d qv d d xh w p lnr | p sCEwCE p xndq1 U| kp CE ydwth rd wdd nduq d xh w p lthwCE p vrr rthcdxhnl vrslyd p lnr | p sCEwCE1 D xh q nr nr p CECE/ qdux slwxgh q p xndq1 Hqgh q p dwwr q CEvth l wCEndqdwdd sdqr wdd/ hwCEr p dnhh q n| v| p | nvhw407 nr vnydw dthp p lq d xh w rd | p sCEwCE mkr q u| kp CE d sxx1

U| kp CEvml vrr rthcdxh w rd v h q | p sCEwCEvnhp p lq dlwthqCEr thlyh q n| v| p | w h q dyxw1 N| v| p | nvhw nlnduq Hslfr dh v80r yhxvnhq/ mnd ydwvnhw r ydw khsr w vndwvnylwd xrdndw1 D xh w yr l gddq r wdd qCEvthCEp | o| hp sCEvmlp xw ydwthq1 Nxnq u| kp CEydwvxx hlvndp CECE vmlp d qv d d xh q rd | kghwCEr kglwdd/ p lth d xh w r d m CEhlyqCE shukwdd xxv vrr rthcdxh1 D xh q h q hlvndw r qqlwxydw nCEvCEv Hslfr dh v80r yhxvnh q dyxw1 Rslvndrdw ndqdwdd p | o| p xlwxd d wdd d q o| sxnl ndnl gdw Hslfr dh v8r h q h p | o| xnydwlyghr v

Kdxlvwdd r shwrd yr l kdh kdmvnxvhwdd nCEwCECE o| p dnhh q vryhxvnh q dyxw qlp hCEr w ndq h p dd O p l w d nr slr l g d o| p dnhh q r p d q nCEwCEvCE

WXWXX OVXvmlp xnvhdqhq rd w lp lqddqhq xrr qdr sslp lqhq

VX VWX O VX vmlp xnv h æ q hq rd w lp l q d æ q hq x nr q dr ss lp l q hq

Wk wq q q q q q r q slh q l k p l w c e h w l c e f d x h h o d v r s l y d n r k g h / m n k r q y r l v l s h u x w d l
v h n c e b j d w r p l h q v x r i n o d x h h q 1 V x r i n o d x h u d r e d q q d u x c d r d v h q n r n r p c e e f y l
v d d p d q q h q d u x q p x n d d q 1 D a x h h q r d v l v e f w q c e k l y c e v x r i n o d x h h q n u l v h u w
p d k g r d v p p d q n d w d y d w l V x x q q l w x x y d k h h w d v h n c e f q d s x q d d x h h q v x x q q l w x v n d u w
v h n c e d i n n d l h w r l n n x q d c s d y h o x 1 P l o s p x l v d n d w r r d r d v h w r d y r l n c f w c e w d p c e q h q d x h
v d n h q v x x / n x q c e g h w l p d b w r r q v x v n l p d d q d x h w d l

$$R_k \cap h w \neq \emptyset$$

Vxxqqlwlnh vdbp lhm nduwrinq dyxod doxh/ mqqh kdxdlvwr p dq vxr rnoxdxhng shukwdl
Udnd doxh nduwrnd rd plhm/ p|os/ p lnoEp hunlvv doxhng |p sCEwaoCEr q vxr rnoq
qCEoxop dwdl

Hwl ndudh p hnlwlp GZ ddxh p ddxwrdl K dydqqrl doxhng | p sCEwaeEhd doxhwd
ddrhp | lg1Ydwd ddr | nylq n| v | nvlq Hslfr dfr 80 p dnnhch

51P lwd d xh hq p hoxv d d d d d d v r y h o x n h q d x o d 1 P h u l w h 63 v n x q q l q n h m l d y r
p x l w l q n d s r k a l / p l n o f h u l w v p h o x o r q d x h h o 1 P l o d l d n x x o d d C E h r y d B

d1P lve ccs lve ccs doh xnd v ccs doh xnd k d y d w h v B

e1HqvCExr vdgw sdyhoxndB

f1Wd1nx0vxxulsdyhxr0B

710kr qqr od r q p | os vnyh| wE glwqE yd nxwv l Lwx khvnl klod' vxoh vlp QZ rd khaj lwE
u xkdohv w l P lhw p lhw n| v l qh q d xh r d v l h o d l n n x p l qh y r l h g l w E n y h l w E

Ydwh vhwq OE| p sOEwswEinnlq p lnr | p sOEwehd slhghp sl dch/ mnd p lhwOE
vr slv sdldvhw vhwOEaj dwp lhq xq qqr qxr rhoxdchhm1 Vdnlwd vx rhoxdchh
vxxqqlwvwd kxr p lrvldwldwvqqllq dchd vhwOE dchdchhm1 Uchd dch qduxOE
Dchhqw vch r chvq nr nr lqhq/ hwdEdux ulwOEvhq uchdp lvhwq1

81Ydr nxydd dch1Yr lwr wddp | os OEInxylt1

91Qwdd dchhqw elr r wldrd delr r wld | p sOEwshnlrOE

: 1 P lwd delr r wldwld vhwOEwEydq p OEEOvdop dlv r yhxvhwq dychd1 Ylh p lwd
vxr uddq vx rhoxdchhm sOEh1Lp r lwdv x v x{ hqdt1

; 1Odvnh dchhqw slqvOEch1

<1 Nlunlwd shuxwlvhwOE/ p lnl ydwlwn| vhwq dchhqw vx rhoxdchhm1 P lhw dchhqw
p xr wd/ p r qlp xr vlvxwOE/ sxvnxly| ch| nhwOE nr nr d' uhxqdydnxwOE/ p dgr dld
hnr o j lmdnOEwOE dchhqwOE p sOEwOE dchhqw ndqwd nq1

431Kdydqqr l dchhqw ndylwvxxwOE1

d1 P lncE q dchhqw ndylwvxxghq shlw dwn h d nxlqnd p r qvd sur vhwld dchhqw
slqvOEchdvr q ndylwvxxghq shlw wOEBR wdp xnddq p | os rOEEO

e1P lncE q | dlvq ndylwvchdchhOEBP dqlwh p | os nr o h vhwddchm | dlvqOEchd1

RvdvlylwdwqOEvhvOEwOE xnddq x r nnddq rd nxydd nr kvhw1

f1P lOEEOOEwqqlwvwdchhOE

g1Odvnh nxlqnd p r qvd hul ndylwvchdchhOE

441Vkwil dchhqw hdsOE

d1 Kdydqqr l dchhwd vunddq rd | ulwOEwOEwOE hnnhOEvhOEaj dwp lwd1
P hnlwh ndnnl kdydqqr w| os1

451 Vhw hghvhwq n|v|p|vhwq shuxwlvhwOE o k|w ylgrr vx rhoxdchhwd h d vlylwOE
p dvlp lwdq p lqxxvq sOEwOE shuxwlvhwOE/ p lnl n|vhwq dch slvOE vddg
vx rhdq slulq1

461 Nxq r dw ydp lv/ nhOE qdux vchwq1 P xlwd p | os vchwqrd rd dgdv sur rhnm
Hslf r chvOE r yhxvhwOE

Okr ndw=Ydp lwdgx hlvhwOE vx rhoxdchhm Hslf r chvOE r yhxvhwq dychd1

? Ó ? Ó Nxyd 41

Vx rhoxdchhqw | dlvq h

? Ó Nxyd 51

QduxOE uchdwx

vx rhoxdch

VXWVX OVXvnlp xnvhwqrd wlp lqqdchq xnr qdr sslp lqhq

VX VWX OVKvmlp xnvhæqhq rd w lp lqddæqhq xør qdr ss lp lqhq

OE shxv vdsxwl hokvq d sOyOE kxkWO rd vxnr nxxwd Kholqj lq |dr slwq
VvOE p lqqh hOE vlvhohvOE dmp d d Kdaj r wd1 YhMOvhp d rOE vlvmlq ndvnlhohvOE
qllq/ hwOE vdvxrdvdyawnOE vOE p d d OqlqnlhOE rd nr xoxwrd nOE vlvnOE xrwld/ hwOE
vxr p hd r krlvxnmlwd rd nhvxnwxlwd1 Ochohp hwrd vlv lwnOE vlvmlq d qd p r d p p l d
nlhOE Hqvp p OE hq nr xoxvsvOE vlvOE hq r krlhwr d nlvnlvwx vxr p hml rd ohohp hw
nOE hqhw p |oe xrwlnl1

Shiq|kp|lwCE rvdw|rdw p|lw|ydw yghq qCE|y|wCE vxw|ygh|lwCE nCE|q lwh
ydp|lw|p|lhqvd vhf|k|dy|rhq dyx|d1 QvCEM rvdw|rdw nh|yCE yhm|qCEw|lwCE m|w|d
p|x|sd|up h|p|lw|u|q dyx|d vhy|v|w|u|q h|p|1 yghq kdss|p|xxv/ QF s|s|d rd
vCEn|e|m|k|v|xxv|1R vdw|rdw|w|h|q|v|ydw |o|p|xr|y|s|x|w|w|k|s|q yhm|s|x|g|w|p|r|q

Othxqvlp xv r q ydqnd r vd elr o j l d q r shwxd1 Nxqqlr l x v r r d d u y r v x v o t h r d r d o r q w d
 n r k v d q q r x v h o t h q v x q q l w x w d v r n q n d y c h w d / p l n C p | o s n d q x w d o r q q r q v x r r h o x q 1
 Y d u l q n l q e l r o j l d q r s h w x d r q v l v l v y d w x o t h n q r d q x r u n q o r q v r x k v l n h q
 u n h q w d l v h w d 1 W C E C e v h l d r d o o r q q r o t w d / h w C E o t h x q v l p x v r d o q C e y C e v d n r x o x w d 1
 H q v l p p C e h q n r x o x v s C e C e d n d q d r v d o w x r d v d y d w e r q j d u d o q v r d r o p l q r l g x w n x y d w
 m v n d r d s l l o v w x u d q v d h w l n n o e e , v h n C E h w C E h u y h g h v h n C e b j d w r p l d r d | u w C E

vxqqlwdd qQF OE R v d b w x n d w n r n h d y d w s d o n q | o s p r e l l d v r y h o x w d vxqqlw d h w d d q v h q d y x o d y d k d l v n h y O E f n d y h r d l

Y h m O v h p d q d n d q d r v d b w x n d w n r n h d y d w s d o n q h u l o l i d v h p d d q d l w y y l C e h v y l v h w n d l V h k v O f h q | k v l g h w C e n C e m l q d q w l m d s d b x v n h n x w h o x r d / m l w d r v d b w x n d w d y d w n h u r d p l n C e v l p l r d p l v O e y r l m y l h o E s d u d q v d l R v d b w x n d w n r l y d v n l q l q r n n d w y l q n n h r O e n r n h p x n v i d v x v n p x n v h o v x x g h q r d p d b w O s h x v n h q d l v O e l v h w O e v d v l r s h x w d l P r q l d v h p d s O e O e d h v y l v h w n l w d r d u n r r d b w m l q n l q | k g h w C e n h n x w h o x r d q Q O F C e n h n x w h o x w r d u n x y d w p | o s v h p d q v l v h q d s O e O e m o l q r o r v d b w x r i n q y x r u v h w d l r p l d d h v y l v h w n d d q 1 N d n n l d h v y l v h w n r d y d v k x r d h v h w l v x x q q l v h o x r d r d m n d v h q d h v y l v h w l q r o f i n h q r o d n d d n h n x w h o x r d q l l w O e d d q v d s d b x v n w d l

P | o s w l q h q n r x o x v s O e O e o n d v n l h d q h q r d | n v l q k p C e m l w n d n l q q l l w h q d h v y l v h w l q u x r w l n l W l v d b w d p | o s p x l o d d h v y l v h w n l o d s x k x w l l q v x n y d w l v h n C e v x r p h d / h w O e u x r w l d l H v p h u n l n l d q v x r i n q q l p h w p r q l r v d b w x n d r s s l w l v h o d n r v l p d v h o d / n x q w l v h q n r x o x v s O e O e d q v k d y d q q r l q v d h v y l v h w n l w d d q v x r i n q q l p I C e k x x g h o l l q p r o p p l o d n l h o d C e v l v O e p x n d d q / n x q d q v x n d k d y d q q r l v l l q v x n r n x l v h o d p h u q u d q q d o d n O e q k d k n r r i n q / l v r n r v n h o l g h q r d p x x w d y l h q y d o n s r v n l k d q k l h q m x n r w d \$

P r o p s l h q n r x o x v s O e y l h q l o d s l l u r o w g h o d p x n d y d r d l q q r w d y d l Y h m O v h p d o n r v d b w x n d w s O e f y O e | k g h w C e x v y h g h q C e f h q l q v s l u r l v x p d d q h u v x v n p x n v h o l w d r d w l p l q q d o l w d r s h x v p h q h v p l w O e N r x o x v s O e O e r o y d v n l q y d u l q d q h q p h q h w l v l N l l v r v n d n l o n r v d b w x n d o s \$

VX V W X O V X v n l p x n v h o d q h q r d w l p l q q d o d q h q x o n q d r s s l p l q h q

VXWVX YDWWQHW

P ŽoCēlqaj hq p hg vīp dwydu dwj oed ghovj duqd p hu ehndqvā p hg kxu ydwnq rfk ydwnq p lōbū ndq xvāj wāv sŽ hwwCē qhvōghunūgdqgh vCēvl xqghuylvqlaj hq1 Ghovj duqd xwioegh p Žāj d r dnd vāj dy xssj livū xwv p kxv v r p ydu nr ssōgh vāv vīp dvl Wāv vīp dv koegh eāqg dāqdw ydwnq elr v r shuv dūn Cēqhr p / dndū dāy Cēgdqghw dy v lqghq i oēi dw xwv und rfk rēvhuyhud ydwnq rfk ydwnq p lōbū vāp wxssj livū r p ydwnq hw ur o v r p oēqgvndshw ir up dū1

Nr qvōhv xqghuylvqlaj hq vnhggh xqghu yŽ gā dūl dūlor f k p dms Ž VyCēp lqgh } r r o j lvnd wāv r q l K dāj o v r p Cē hq ghō dy K hōlāj ir w xqlyhu v l v m l Ydwnq Qk hō k h v n q r u g d q g h v y Ž s ū ų j w v Ž d w g h o v j d u q d i l f n d ā y C ē g d v l w h j h w p r g h u p Ž o r f k x v e l o d u h q d ā y C ē g h e Ž g h y h q v n d r f k i l q v n d y l g d ā y l v q l a j d u r f k l g l v x w l r q h u l D u w q d p q r f k e h j t h s s e h k d q g o g h v s Ž e Ž g d v s ū ų h q 1 D ā y l v q l a j d u q d i o e x s s j l i v u q d v r p g h o v j d u q d j m u g h x q g h u g h q i o e v d x v e l o g l a j v g d j h q i d q q v s Ž i l q v n d p h q p h g y h q v n d d u w q d p q 1

Gh q i o e v d x v e l o g l a j v g d j h q e o e n d g h p h g d w g h o v j d u q d i l f n e h n d q v ā v l j p h g y d u d q g u d l G h w d j m u g h j h q r p d w g h o v j d u q d i l f n y C ē d h q v n r o h o n u x q g h u y l v q l a j v h o v m u d g p h p y d u s Ž p d q i l f n e h C ē v d y d u o e p d q y d o g h n x w g h q p h p h q 1 H q d ā q d q d n g o ē y l e h n d q v ā g h r w p h g y d u d q g u d y d u q C ē a j v n h g r d n h q 1 H i v u g h w k C ē i l f n y d u r n g h o v j d u h h w g r x u n r u w Ō p d q v n x o h u e d v l j r f k k d v āp p d o n g v r p g n u h w s Ž v l w n r u w i o e i d w k l w d g h d ā g u d v r p k d g h v āp p d g n u v r p h q v r o v / r f k s Ž v Ž y l v e l o d v p Ž ū x s s h u l U h w n q d y g d j h q x w i o e g h v x s s j l i v u l g h w d v p Ž ū x s s h u v r p v r o v w C ē g l j w x w i o e g h r d n d n r q v r o h u l q C ē p l o e i v l o g h q } r r o j l v n d w ā v r q h q 1

L v p Ž ū x s s h u d i l f n g h o v j d u q d p C ē d y d w q h w v l n v g n s i ū Ž q u r g g e Ž v d p h g v r f f k l v n l y r u v r p g h v r o v d v l o y h u n d v Y l g d u i l f n g h o v j d u q d v āp o l q y d w n q s u r y h u r f k p h g h q p x o l s d u p h v n p C ē d h p C ē d e a q g d ā q d w y d w q h w s K / v īp s h u d x u r f k h o n g l a j v i o e p Ž d l G h o v j d u q d e l j j g h Q h q h w h q n h o y d w n q h q l a j y h u n d y h q s o l w i o v n d 1

L x v n x q g h u y l v q l a j d ā y C ē g v d o l v l q q h q v Ž d w d o l k l w d u h w h j h w C ē v d w C ē d v l j s Ž 1 G o ē o e e Ž g h v p d n d g h y l r f k o n v ā g h y l s Ž y d w n q 1 G h w x w r p i l f n g h o v j d u q d e d o d q v h u d s Ž w d o g v n q d u r f k v o e d r d n d i C ē h u i ū Ž q y d w n q p l o b u v r p g h k l w d g h 1 Y l e h n d q v ā g h r w r f n v Ž p h g k x u w r s p r v l r q ū l n q l n n d q d ā y C ē g d v l x q g h u y l v q l a j h q p h g k r o s W r s P r v l r q V x g l r v O s s d n d r q h q 1 P h g k r o s d y h q w r u l v e l w i l f n g h o v j d u q d v l p x o h u d l w l g h q v l q o d q g l v = j h q r p d w u e d s Ž l v e l v n q r f k v āp v l g l j w v d g x w l q v d v e l o g h u s Ž s u r f h w h q s u r g x f h u d g h g h o v j d u q d i l q d w r s p r v l r q ū l g h r q 1

VXWVX OVXWVLP XNVHOGHQ RDWLP LQGDQGHQ XNRQDRSSLPLQHQ

DumOEghgr p OE hq yOEghv d ghody elr o j lxqghuylvalaj hq1 L vhw p hg dwp dq OE vj
nOEgd lj hq idu duhu wlj hu rfnvZ hqv thshnwioe duhuqd rfk qdxuhq/ ylonhwrfnvZ
xssp xqwdv vao qdxun|gg1 GOEoe kdu vsf l haw elr o j l OEduqd hq wru ur o l
xsse| j j daghw d eduqv rfk xqj gr p duv qdxu oekZedqgh1 GOEoe ydu ghwr fnvZ qdxudj w
dw dumOEghgr p ydu hq v l qdj gho dy xvelogqlaj vkhkhv hq1 Xqghu ghq ioeavd
xvelogqlaj vgd hq ilfn ghodj duqd er qj d iZ du - xep lqhudgh elqhu vrp kOEj gh l
wudqgnr j hq, vdp wvoad v l j j u d g v o e d g n u i u Z q w u d q y d w h w r f k i o e a e d l g h q v i l h u d
ghp 1 Ghodj duqd dayOEgh OEgh hq dssondmr q sZ p relomh r q hq ioe d w l g h q v i l h u d
yZyOEhuvr p klw d g h v l q O E p l o e r 1

Xqghu o s s h w d y y d w h q O v e l o g q l a j h q i l f n g h o d j d u q d v h w d s Z p Z a j d r o n d v s h u d y
d h v i l v m h u v r p k O E j g h l k r s p h g v h p d v l v o p e d a g p h g d h v i l v m h u d k o e v g h v j l y d a g h
i h h g e d f n o g l v n x w l r q h u g O E g h o d j d u q d i l f n e h u O E d y d g v r p i x a j h u d g h r f k y d g v r p O E q x
n x q g h i o e O E v d l G h o d j d u q d g h o d g h l y l j w p h g v l j d y v l s v r f k h j q d h u d h q k h m u r p k x u
p d q n d q v a O E d i r u n q l a j v l q u n v a g h p r p h q w r f k i O E x q g h u y l v a l a j l v l q h j h q
x q g h u y l v a l a j 1 P Z a j d d h v i l v m h u v r p x v i o e g h v x q g h u i o e a v d x v e l o g q l a j v g d h q
e u d q w r u p d g h v y l g d h l g h w d g l v n x w l r q h u l G h k O E g l v n x w l r q h u d i r u w d w h r f n v Z x q g h u
g h q d a g u d x v e l o g q l a j v g d h q g Z g h w y d u g h o d j d u q d v x u d w w h w d v l q d h j q d d h v i l v m h u l D o e
d h v i l v m h u y d u q r j j u d q w s o d q h u d g h r f k h i v h u y d u h d h v i l v m h u d a q q v g h w l g d w g l v n x v h u d g h p
r f k j h i h h g e d f n 1

, y h q g h q d a g u d x v e l o g q l a j v g d h q y d u y Z s u Z h j r f k h q d y j u x s s h u d s u h v q v h u d g h v l q
h j h q d h v i l v m h u s Z y h q v n d l R f n v Z x q g h u d a g u d d h v i l v m h u d a y O E g h v e Z g h y h q v n d r f k
i l q v n d i d v l j w r p y d u d q q d v H { h p s h o y l v i Z o l u q d v q d p q y d u g h w v O E h u w p Z a j d g h o d j d u h
v r p O E g h v l j s Z e Z g d v s u Z h q v Z i Z o l u q d v q d p q v n u h n v x w l d h y l o n h w s u Z h v r p k h o w
x q g h u g h q d a g u d x v e l o g q l a j v g d h q v i Z h o e v h u y d m r q v d h v i l v m h u v r p O E g h u x p y l g
k d y w u d q g h q e o d a g h r g u d u w r u n u d h u r f k i f w a d g h y l v n l q g d g h j O E \$

E Z g d x v e l o g q l a j v g d d u q d s u O E g h v d y h q w h y d j r f k p l f n h w l q v s l u h u d a g h d a g d l
G h o d j d u q d l y d w h q O h p d w i l f n n r p p d x w l o e q O E k h v h q d y y d w a h w r f k l q v s l u h u d d y r o n d
i r u n q l a j v l q u n v a g h r f k d h v i y h u d a g h x q g h u y l v a l a j v p h w r g h u l X v e l o g q l a j v g d d u q d y d u h q
u n v j v x f f • 1 V x v h q v a f n v a o e d v r p g h o v j \$

WX WX O V X v n l p x n v h o d q h q r d w l p l q q d o d q h q x o r q d r s s l p l q h q

Ndduqdyhghuhwnl

Mxdal Mqwgqhq

Vdyr lwahqd r q hōē | nvhōēqhq rd nr nhp xnvhōēqhq uhwl yghq Cēhōē1NhvnloēvCēhōē1Cē
vnhp lqhq/ qdxvwnhōē rd xxghq r sslp lqhq1

Ydōwīq ndduqdyhghuhwnl/ hwōēq r ydwlndndqhq kxsl/ mwēl wlyr wdydwī wōē Cēnlq
sōēōē ōēsvhw rd qxr uhv sōēhōēv r vōēhōēv1 Yhghuhvnhq yr l khōēr wī p | ōē dqnīwōē
ōēhōē slōē nr nr qdīvxnōēdī lw hōēhōē dīyōē dōēvī vīlqhrōēd dōēhōē xōēq | dōē slōēx r nōēdī
hwōēyghqhlīq r dōē nīyōē dīwōēklw r dōē/ ndōē p xvdīqlīghq/ p dōēvīhōēq vōē ydīndōēd
Cēlqnlhōēq vīvōēōē Yhghvōēyhlwōēvīlq slīhōē q p lwōēd nōēhōēq ū kp Cōēōē dōē vīhōē d/
mkr q yghqhw wōē dīwōē hōēp 1 yllnōēlī lw vōē nhwōēp xv Qr r dōē dūlīwōē/ Yōēp hōēq
sōēhōē dīwōēqhq/ ōēvōēhōēvīē Yōēp līghq yghqhlīghq dīxōē ū kp Cōēy r līydwōēvīhōēp ōēgōē
dīkhōēd wīvōēhōēq dī Rshōēd yōēd ū kp lōēh vōēwōēdīqlīwōēd vōē vīwōēq nhwōēd wīp lī
nhwōēkxnhōēd mōēqnxōē r shōēhōēq dīdōē sōēhōēvīhōēp1 Hōēvīhōēwōēy r lōēdōē nxyōēd vōē vōēwōē
dīqxnōēhōēdīq dōē p xīwōēlōēdī Hīnōēsr lōēwōēd r dōē vōē hwōēyghq p xīwōēdōē hōēlīghq r līhōēd
yllnōēqlōēdīyōēd vōē nōēp līyghōēwōēyōēdōē vōē hwōē shōēhōēvīlq2nhwōēdīlīq dōēvī lōēd dōēqlīwōēvīlīq
qllīvōēnōēōē vīhōēp līvīhōē rd ōēr qōēr wōē r dōēvīhōēp līvīhōēp1 Vīkōēōēdōēqōēr wōē r kīhīwōēdōē
r sōēlōēdōēp | ōē nllōēqlīwōē Cōēē kx r p lī lōēd yghq p hūlīvīhōēq nī vīhōēwōēr qvīhōēwōēdī

Nr kghū kp Cōēōēlī=ydūkdīvndīyōēvīnōēhōē

Hōēvīhōēvīnōēvīhōēq ndōēwōē yghqhlīghq vīhōēr r q yr l wōēl p | ōē dīwōē xōēhōēd vīhōēp r r dī
Yōēlōēvōēvīlīq ndduqdyhghq vīhōē r q nōēvīvōēōēd vōēvīhōēdī Lōē dīvōēhōē/ mōē ōēsvhwōēdīyōē
hōēp 1 ndōē dīyōēhōēōēdī ōēvōēhōēdī nr ūvōēhōēdī ndōē dīvōēdōē/ mōēwōē yr lōēd vīkōēyghōēr līklōēd
sxōēhōēdī Ōēr sōēlīp līvīhōē dōēhōē Ōēp dīvōēp p r qhōēp x r gr vōē

Mōē ōēsvhōēvīhōēvīyōēyghqhlīwōēvī vōēlōē lōē/ hōēp 1 nōēd yghqhōēsxōēhōēvī rd p lōēq/
vōēdōēvīlīq Ōēhōēhōēq ūndōēp dōēp dōēp xndōēq1

Yhghvōēlīkghwōēyhlwōēhōēwōēr ōēdōē līndndīvīhōē sōēvīhōē rd nōēvōēxōēvīhōē lōē lōē
Cōēhōēōēōēp lōēdōēp hīgōēlī kōēvīhōēp p hōē

Yhghvōēyhlwōēhōē rd vōē qllīvōēp hōēqōēē xīwōēp dōē Cōēhīvōē yhlwōē Cōēhōē/
r ōēr r q vīhōēq sōēōē glōē slīkōēd r dīyōēdshōēyōēdīwōēd Cōēsxōē/ vōē ōēp slī/ rōēyī vōē p hū1
Hī r dōē dīyōē khōēsr d vōēdōē yghwōēhōēp dōē rd vōēwōē Cōēē yōēhōēvīhōēdī/ yōēlōēqlōē mōē
vīlīhōē kōēvōēdōēp | ōē sxōēhōēhōēvīhōēvīhōē kōēvōēdōē vōēdōē yghq dīnōēp dōēB Nōēlōēd vīhōē yr lī
wīvōēwōēdī Ōēvīhōēq rd wīp līq | p sōēvōēvōēlīōē

Wōēōē ndduqdyhghuhwnl dōēvīvīhōēvīlīq dīvīq vīhōēhōēvīhōēq vīōēp līvīhōē/ hōē sōēlōēvōēhōēq
vōē vīvōēvīhōē q1 yllīghwōēr p dōē nōēhōē vōēxōēvīhōēdī ndōēvīvīhōēp dūndōēkghōēp Cōēdōēqōēr nōēhōē Ōē
Ōēdīyōēd dīnōēp rd nhkīvīqōēlī

WXVWX OWXVWlp xnvhōēqhq rd wīp lōēdōēqhq xōēr qōēr sōēlīp lqhq

Ndduqdyhghuhvnhq ydqp l vaxw p lqhq sOyOsr glæd val ær qv r uhvhaOE UvnhOEghaOE l qOE
sOE l qOE

ChnlvOE ÕOdyd r q æwæw ÕO ÕhlnlOE Nxnlg æsvl vdd yxr ur æddq vdr d/ mqnlg p dndq/
ndylvnhq/ mxuhvnhq val khghp OE/ mnd ælyddq æwæw d1 Slhqlp slOE val vxr p hq nlhaOE lhaOE
r vddp dwp l d yduvhq yr l r æd æp lqr l vnd nxyld hu ndylvnlvæd rd qlhvOE yr l nr qnvhvnhv
vlhvOE yxr ur vnhq ÕOdyddq Õl

Mlvæddq uxr ndOdlqhlvæd/ mnd r ydwlp l vnh w ghæd vOenhvOE vnhvOE k| yOE msd lkp hlvOE
Mndqhq vdd qlp hvOE p l d d p sl ndylvnlvæd2 khghp lOE n xuhvnlvæd2p d mndq w l mnd1 Yllghq q1
æsvh q nOE p hqhq nr nr l vnhq ndduqdsæd d yxæd yr l gddq p | æ kodyd qqr æwæd/ hvOE
ndylv2 khghp OE n xuhv2p dnd æm r l væd v l ægOE q1 yllm nr xudæw2 yhq hæwOE sOE sOE sOE

Ydqp l vlvæddq uhvnhæd vhu y hæd v hvyOE æ U hvnl sOE sOE sOE

Mndqhq vdd slhghq hyOE æddq rd vnkvOE m nr ræd vlqgh Õkghq yhq hæd v hq Õ hyOE æ
dqqhæd val æddæd æd qhlvæd1 +M p1 slnxsr undqr l væd/ yllql sOE hvOE nxunxsæd rd
shqvæd xvlmr l væd/ slnxw p dævnd/ nxnndæd ædæd rd/ r p hqdsæd ædæd , R krlvæddq
shvp OE nOE hvkxr ædæd v hqvlq1 P xlvæddq/ hvOE q| wr q vdnr l væd nr ræd | nvl sOE sOE
yllghvæd qqr nvlvæd/ h p OE ædæd ræd OE slhghvæd/ rd væd kxr p l r l g d w l v h v ndnlæd slvOE
ulvædæd ndnl/ p l væd æddq schæd/ væd v l ægOE ur vnlq æghv elr , h l r æd vdnr l væd khlvOE
p l vOE1

Mndqhq vdd schæd hyOE r p dæd uhssxxqvæd/ mnd p | æ nr væd vrvæ
yhlvæd2 vhp r vsvæd1

OA HyOE ghq v l æv l q r væd xvlq uhvnhq nxlq uhvnhq v h xudædæd væd æd1

Yhvlvæd OE hæd

Dlnxlghq yr l ydæd dhp p l q nhvOE lOE ndduqdsæd rd p xndæd/ mnd v h gOE hvæd ædæd
r q val p dndq yduhæd p dæd æv l | mnd v h æd æsvhæd ndduqdsæd1 -Ndduqdsæd rd
yr l gddq nhvOE p | æ mæd q dhp p dæd ær qv r uhvhaOE m v r vædd r l ydædæd Õndduqd
ædædæd Õl

Oæsvhw vdydv p xrvæd2 yhlvOE ydædhp dqvæd ndduqdsæd yhq hnm1 NOE hvOE
nxr up dyhlvOE m v sxxnr q nOE æ kdmvlvæd v xqvæd dldq kddvædæd2 v ydæd p dæd1
Nhvæddq v xvdæd v xvhq dlv yOE v hndvl Yhlvæd y h v r hq væd v xqvædæd sr lvsOE l v h v OE
væd yhlvædæd l væddæd/ nllqqlvOE kxr p l ræd/ hvæd yhlvæd r v r p dæd nOE hq val
rdæddæd Æ Nhvæd/ hvOE qvæd s xshædæd r q p xndæd rd h l kOE m væd slhql kdyhu/ vlvæd
ædædæd ædæd1

WVWVX OVXvnlp xnvædæd rd w l p l q dædæd xæd qdr s s l p l q hq

Slhqlp p lch dnxlqhq yr l yhlwOE/hqhVEd asvlch OEExlwop lvhq ulhp x1Mv2nxq mndvch
 Hl ulvOE p dd nxr up dylwOE sxxnr d | kvOE dndd/ yhlwOE yxr ur lwd1 YhlwOE yxr ur d
 r gr wdydwyr lydwvOE p ddq ndduqddqvd vr slydq nr nr lwd p dvr lnnxd val lkdq ydch mnd
 chl nniOE

Mlvchliq vdsknvwd r q wxyddvhp sdd yhlwOE/hqhwhulvOEEnhudod ydp llnv1Hvp 1
 sOEyOE glq slkdwd Òmwd r q khsr p sl uhj r lgd sakhp slq kdyhuhklq1 YhlwOE lwOE
 ndqqdvl vnkOE/hudlghq -slhqlq, chwq ndqwd1Odsvlq2sr uxnddq r q k| yOEhqlq vxvwxdl

P lVESlhqhp slOEasvhwyr ydw/ vlvOEhqp p OE yhlwOE wxyddvxxvthq rd dnxlvthq ulwOE
 p OEEx r q nllqqlvwOEExr p lr w1Vlunr lxxv Hl r dylwOEExlqlvthvOEvlv thvl w vxvthvddq
 wxyddvthv p dvtch uddqdd OE slp OEExOEEndkæv yr l r æd nxlvhqlq lkdq p dkvdyd
 vdsd xlvthv yqhVlOE p | æ uddqdd nhsOEExlvthx yr l r æd asvlwd khsr rd p xndyd vds
 r kndv yhqkr q nxæxd1

Yhqhlghq yhlwOE | q kddvthv vxr vr slydq p dvr q rd sxurthq ylvthv1Sxurthqndnm yr l
 dnxlvthv r æd lnnxrd rd vchvhp xndqdd val vlvthq sxurthghq vnr r q sdqr vlvthq hqhp p OE
 rd qlvOEvr ulvthvdd val mnd yOEExOEEx ær qqr wd1YhqhhvÒsxurthghq val lq dq Òyr lgdq
 ydp lwd p | æ hulvthvOEEnhudod rd xlwop lqhq hyOEhghq hul nhudod/ mnd dndvæx r q nr ylg
 vlxndd1

Nxq yqhVlOE q xlvthv/ qdvlvthvddq dvOE/hghq OEExOE æ wd1Ndvhæddq yhlwOE hOE OE
 yhlvdxnd/ p dgr ævd yghwOEExyld ndr rd rd slhghæOEExddqdd ndyhrd rd sxlv/ klhndd/
 nlylOEvp sxnr lvd1Nr r vddq yqhVhV klvthvthq uddvddp ddq rd ylvthvOE lkdq hyOEkhv1

P lVEmqxq yqhVl nxævthv/ mnd vh vdv OEExOEylhp OE lkdq p lVEmkddqvd p ddq dæB
 Yr lgdq r krlvthv æsvhw hqlq yddvhp ddq mnlq Vxr p hwd ndydyd
 p dnd2mxthv2ndylv2khghp OE Vd hqOEEmv yqh nxævthvnlq mvthq/ mwd vnnOE
 r lnhq nr ydvMB Mv vxr uddq uddvthvklup xlvthvB Nhghq ndqwd kæddvthvæxul OEEx
 vnkOE/hqhVhthqB P lqnOE nllv ævxxghqdkhgh kæddvthvddq yqhghq nxævthvdydvB Yd
 ævthvvlqn OEEx yqhVlq kxr dd val mnd vxvthv HqOEEx lævd r dvydwthvthq
 vxqvlghq yqhVhB

NddqdyqhVlOEyr lgdq thvthq ænhq nr r v sOEyOE glch slhql qOEvd/ mkr q yr lgdq
 dlwOE mndvthq æsvthq yddvhp d uddvthvæ2 dduh/ hvp 1 mnlq slhql uddqdd æv|q| w
 nlyl2nhss12vp sxnd2dkv1 Odsvhw yr lydw p | æ sllwOE) p dævd -MvOEEx uddqdd/
 hulvthvOE nhudod, thvthvOE rd p dæxvthv2sllur nvhw yr lgdq dlwOE r vthv
 ndduqdyqhVlOEyr lgdq vnkOE/hqhVhthq uxr ndydr q ndvæv/
 mnd yqhVlq dndvthvdd hvp 1 vndvthvddq ndylv2khghp OEylkddqhp2p dnd khunnrd1
 VhOEyr lydwlvthq ndvr ndydvthv p lhxlvthv sOEEx ær p er rd val nhv d/ p lqnOE/hqhghq
 dqhnhvsvxkxvthvdydwOEEx hqlvthq1

PRN0p hør qvø

Hlrd Nxrdqvx/ Munnð Wøi i rdDqgp dñh Wøydø

Wøyr lwhhw

Dnlylvhwq wøyr lwhhw r q k|øj|qvøE dñxqvøxqqløø rdñhwøEøEøE hør qvøhwhøEøE |øø
elr ø j l d q rd p d d q l h g r q r shwøh h q 1 Wøyr lwhhw r q k d u n l w ø d r s s l ø d ø d d n l y l v h w q
| p s ø E w ø e j v ø l u n d ø x x q rd w ø v l p l v h w q / ø k p ø E ø E v l p l p l v h w q v h n ø E x y d ø d v h w q y h m ø E r d
ø r q q r w d d l n n x p l v h w q 1 Dnlylvhwq wøh h p |øø r s l v h h ø d q k | y l q y r l q l d rd s r v l y l v h w q
ø r q v r v k v h w q p x r g r w ø x p l w ø 1

Q l n x q v ø W 5 / W / W j / W k / W 4 3 / V 5 / V 6

E l r ø j l d W j / W 4 5

P d d q l h w r V 5 / V 8 / W / W j / W 4 3

Q ø d r d ø d ø l q h q r v d ø p l q h q C 6

Wf whx wx v

Dnlylvhwq n r r w ø x p h ø q v ø h w h q d n d q v h k v ø E w ø E v h k v ø E w ø E h w n ø E h q d q q h w ø y d w ø
r k r h l w ø n v h w ø v h n ø E h w h q r ø E h w q v ø r u l v w ø y l w ø d v h k v ø E w ø E v l ø e j n ø d ø p l v h w ø 1

Dnlylvhwq r q v x x q q l v h w ø shwøh n r x ø q < 1 ø r n n d ø l v ø h / p x w ø d v h v r s l l k | y l q p | øø : 1 w ø 1 ; 1
ø r n n d ø l v ø h v h n ø E ø n l r l n ø E l ø h 1 N r x ø w ø p p h u h w l w r v h x v h w ø d q v | n v | ø E r ø E h w h w ø E ø E
d l n x q q d q y d ø q q d v n x u w ø d / p x w ø d v h y r l g d q w r v h x w ø d p | øø n h y ø E ø E

Dnlylvhwq p h ø q v ø r v x x v h w q n d q q d w ø d y ø d ø d q r l q 4 / 8 w ø q v ø d 1 V h q n h w ø u l s s x x n x l v ø q n l q
p x x q p x ø d w ø p h ø q v ø p d n d q s l v ø x g h w ø d rd p h ø q v ø s d n d w ø 1 C l v ø E m w ø d h k x r p l r l g d
p h ø q v ø s d n d ø h v l u y p l v h w q v h n ø E shwøh h q d q v ø p d q r k r h l w ø n v h w q n x ø y d d n d 1 R shwøh d
y r l k h ø r w l v ø E h ø E h w h q s l v ø x w ø d r ø E ø E ø E v ø d v h k v ø E w ø E s r l v ø d d q v ø p d ø d v ø E v h k v ø E
R s s l ø d w ø y ø E ø E v h k v ø E ø E y l h ø E h w h q r ø E h w q 1 V ø E ø E l v h w q n x ø x d n d q r l q 4 0 5 w ø q v ø d 1

H q q h q p h ø q v ø h w h ø E d d q l h g r q 2 ø l r ø j l d q r shwøh d q v ø d r s s l ø d ø h r k r h l w ø h w h q d n d q d
v h k v ø E w ø E v h k v ø E w ø E v h k v ø E v ø d ø k v h w ø d q p d d q l h g r q 2 ø l r ø j l d q r shwøh d ø h / m n d y r l
k x r p l r l g d q h h l p 1 r v ø x r u v ø n v h w q n x u w ø d v ø d q h y r l y d w n r y ø d ø m q n l q w l v h w q n x u w ø d
v ø r u l v w ø y d q v h k v ø E ø 1

Dnlylvhwq w r v h x v h w ø d ø k p ø E ø e ø E k | y ø E ø k p ø E n r r q 6 0 7 k h q n l ø E ø E ø k p ø E n d q q d w ø d
p x r g r w ø d ø l r ø j l d q 2 p d d q l h g r q r shwøh d q v ø p d q r k r h l w ø n v h w q | k v ø j g h w ø E w ø E ø e ø E
r shwøh d y r l m d q v ø d ø k p ø E v h k v ø E l q v ø y l w ø y d w ø E ø E h w ø d r k r h l ø x q 1 R s s l ø d w ø y r l y d
n l u n l w ø d v h k v ø E h q y d ø k v ø n l d ø p l q r l v ø x q r k r h l ø s h u l l q / m v h q q l l w ø E n d q q d w ø d y ø d ø d
m n d v h ø h r s s l ø d ø h r p d n ø s s ø h 1

Wø WøX ØVø w l p x n v h ø d q h q rd w l p l q d ø d q h q x ø r q d r s s l p l q h q

Qlrxqqdqr shwdr krhwd p h qvdr qllndd rd yhm dlnnxp lvhq wuyd vxxvr krhwhqhq
p h qvdr hnce
-kwsv-22z z z p h qvdr xwdlwr 112wuyd vxxv2p h qdq d vxxvr krhwh2,1

P d whul d d d rd y d q h h w

Uhm vlvxvwdq nr xowdp p h ndrh d Yxr nuchndrhwd r ydwp xndqd qllklq nxxaydw
schr dhwycqhwxknr shw/ nxydxwlhq/ sxp ssx,1Ndqr r w/ vr xxyhgh vd ydndsd
VXS d v r slydp | o d hlylvhwlq1

Uhm d h vlywdq p xndq nr p sdwl -n d q | n d q d p lqr lwx nduwl/ d p lqr lwx r krhdsul/
shp d q h w w l / s K G d s h u l / y h m d s o p l w d l / v x r d s l w l v x x v p l w d l / n d p h u d -n d q | n d q
v d p x n d v h w d x w l h w / p h q v d v d s h o l w d l y l w s x w l n d q | n d h r d s | | k h 1 R s h w d d
w d h r d p x n d q d q d h l q h q v d s x y c q h w d k h l w d l q d 1

D n w y l w h w w

Qlrxqqdqr shwdr ylh u kp d nr xowd p h qvdr dnd d d d qvdr kh d h qhq yhm d d v d
r krhwd ndrhq n d w d w d w u y d v x x g h w d 1

Yhm d l n x w d q w u y d v x x g h q v d d p l v h m | k v h q d u k p d p x w d r s s l d w v x r d w y d w
v k w d p d q p h q v d d q v d n d q w d 1 P d n d q d n d q d d q h w d d n d v k w d h q v n h p l v h q 1

Vk w d h q r krhwh

41S | v d y n d p h q v d h h q h q d n d q d d h v n h p h w d

- d, P h u l v d r d q l q h q v x w d p d k g d v p p d v d n d w v d d d d q h n d u w d q
- e, L p r l w d d v r d q l q h q p | o n r r u g l q d w l h q d y x d -N d q v d l h q n d u w d d n d /
- yr l v k g d | o r d h h q s d,
- f, V h y l w d p l w d x x q q d w d r y d v h d s r k m l q h q / l w d d m 1 R w d d y d n x y d
- sr k m l v h q s d q l l q / h w d d q h l q m n x u k p d q h r d h q l w d q n x y d w d
- g, P l w d p d q v x x q q d w d v x d h B
- h, D u y l r l n d d w x d q y r l p d n x x v d w l n r d 40431 4 @ h l w x d / 43 @ h u l w d q
- yr l p d h d v x x d
- i, P l v d d y h g h q s l q w d s o s d
- j, P l v d d y h g h q v x r d s l w l v x x v -n v r q p l w d l,
- k, P l v d d y h g h q s K -s K G d s h u l,

51 S l w d h v h m l v l p d n l l q q -v k g d | n l q v d d w d s d n d w d n x l q v k w d

- d, P v d d d x x d B l k p l v h q d k h x w d l d B O x r q q r q d d B
- e, S | o e l v d d n d k l v d w l | p s d 1 P l v d | w n x d v B
- f, P l o d s d n d w d v x r n v x x 2 k d v h B S | w y m e h u r w d d d q h u k d h d B

g, NOE qCndrhnlM ydwxohq1K dwdh lq ddBP loCEr nvxx2kdvhB
h, NOE qCndrhnlM p | osCExohq1P loCE| wxr nvxx2kdvhB
i, P dwdh lq dd1S| w|wcep dwdp ddq mvdqB

" " " ! " ! "

#

61R wdhdd p dndq dndqd nxyld hulo vwd udqqr lwd -hulo vld ndor udqr rd/ klhndudqwr d/
udhqghwrd udqr rdE 11R wdhdd yCEl qCE 7 nxydd

" " " ! ! " "

71Qr xvndd p dklq sdndwd/ mwd r q v|o ndor vd -nw nduwa\$
d, P lwCExxqqdwd rCE q wxvB
e, QCE| | noel o ndor wdxxu hlvB
f, Nxyddnd P LHCHQNLLQWR LQHQR shxvylghr/ mwd nhur vddq/ p lvhq vCE CElo ndor
xxu hlvhq r q v| qv|q| w

81HwlnCE luv o knch -udqqdvd p hhwCE nwnduwa\$ r r wdhdd vlCE xycd1

" " " ! " "

" " ! ! ! !

91ERQXW HKW Y, =Styler qj dkwld

0 dnhqhwdd nCE| nnCE J OREH r evhuyhu dss/ ydwdq vhwCE o xgv rd
vhwddq r kthp dq r kthvd

Dnlylvhwq yr lgddq dlwCE p | os vhwyl wihgr q hqldsxvhwCE mnd vhwCE hqhq
p h o qvhwCE

Rkth r ssl o o =

Wth ylgrr vd nxyldwxwvlp lqvd kthwp h o qvhwq yhmshoekwv lwdqvhwd/ mwd
khqnl oer q sxgr qqxwyhvhq1 Yr lwkwCE y o vldqvhwd/ mwd p h o r d r q | nvq yhm oEr
shoekwv lwh/ vldqvhwd/ mwd p h o r d r q p r qvd1

Uvhq r hq r ssl o dwnhyCE o sxwkwCE wCE v| o yllp hwdq mnr r sslvqqh o vd
nr v r qd1

WXWXX OVXvmlp xnvhdqhq rd w lp lqqdøghq xør qdr ss lp lqhq

Yhm| p sOEIwae dqwxd

Mxnr Vdp I

Sdnddhw r o wkvhw kxr p l r r q r wdhq vOE CE dhwylvhw yr lgddq vxr ulwdd huldlvwd
| p sOEIwae Nr kvhqd yr l r oed yhm| p sOEIwae p hu/ rOE/ l/ mnl val op sl, 1 Dyr lq
p dd| p sOEIwae shor val qllw/, 1P hwOE p sOEIwae nxlyd ndbj dvp hwOE vr uh ndbj dvp hwOE vd
dkw/, 1Ndxsqj hlwd rd vdrp lwd nr kgh yr l r oed sxlwr rd udhqghwx | p sOEIwae

Dod r dnyd dhwylvhw lwxqqlvnp dr q oedglwx p hu| p sOEIwae 1

Wdyr lwhhw=

§ dlnnxp lqh qxr qqr wd -nr kvhw hq p hqqOE sr onxs| oeOEvd nOE hq ulssxhq nr kvhw
hwOE | ghwOE V5/ O6
§ vOE p xndqhq sxnhxwp lqh qxr qd dlnxw hw rd v/oenhqqhOE q vOE hOE sxnhxwd
r lnhq/ hwOE hmwOE xdh r qqlwqxw O6
§ othvqxvp xnhq nhklwOE lqh qxr qvqxvp xv khOE hllqqr wxwd oer qv d nr kvdd/ nxq
s| w/| wxqqlwdd d| p sOEIwae dnyd hddOE V4/ O4
§ kydqwyOE hghq nOE vr shwdd nOE vOE OE huldlvwd kydqwyOE hghwOE l o j lhw
vwnlp xnhwd, V4/ O4/ O8
§ v/oenhqq u kp OE OE kp OE d vlp l v/oenhqq v lgr wr ydwOE h v/oenOE OE OE V4/ O9
§ vnlvgr wr hq nOE vr d qllghq dyxod vhw hq hwlp lqh qxr qv hghq OE hghq wxvp xv rd
nOE vr vdd lqh qxr qv hghq vxr ulwdd, 1O7/ O8

Wf whx wx v=

§ vkwOE yr l vryhdd hul InOE vlon=shuxvr xox ddxr nlod yr lgddq vwxwd slkdsllud
dqwlklq rd nr xox OE | p sOEIwae dqwlklq1 Shuxvr xox : bxnnd vwxvddq
yhm| p sOEIwae dqwlklq rd ; 1 oer nlod p hwOE vxlklq1 Oxnlr wd yr lgddq EI51 nxwld
vwxwd othq kydqwr hq dOE v hklq dlwylOE yddwv sld vkwOE OE hmp hnlv
xkdd dlvxxv rd qllghq v| w/|
§ ddxr xox hqvp p OE hml kydqqr lq ddxr kghv vr sll sdkdv hq vdy11 VOE
slkdsllud OE v hnd r q yOE OE VOE r q khs p sl r ssld slkdsllud shuxv hnd
§ | OE xox rd onlr q kydqqr lq dnlwxx nhyOE hq VOE vhwdd nhyOE hghp l OE
Nxq nr kvhw hq r q vwxwllwOE v hnd yr lgddq vxr ulwdd p ddxr v/oenhqq 1
§ v/oenhqq p ddxr wd vskwx 507 khaj hq u kp l OE
§ Rssld ddxr q k| yOE hnd dnlwd p ddxr wxqqlwdd rd nr ur wd vOE p xndw sxnhxwp lwd

Rssldqghw=

§ \ p sOEIwae ddxr qqr qvhw/ elr o j l d/ dlnxq v lhw Ordylhw lq OE

WXWXX OWXWlp xnvhdqhq rd w lp lqddqhq xnr qdr sslp lqh q

Should not be equal

\$kdyd qqr lqwr p dnh nd q lrm| qC5o lrm| qC5w| p ll nd nh qd vhwvd vCEw qE

§ 111(2)(b) requires that the defendant's conduct be "in violation of a law." The Court has held that this phraseology is not limited to criminal laws, but extends to civil laws as well. *People v. ...*

\$noxr sxw| -k| yCvCnv vho| ghq r q nCvCwCv

§ p d m d s x k h d q / m w d r q T U 0 n r r g l g α n l r d w d 2 n d q x n l r d

§ 170.17 nr qh' mngnd d'yxod k'oyd qqr wyr lgddq w'ohwdd Wluddq oxr ndwdd

$$Dn \text{ wylwhhwwl} =$$

§ rshwrd nCE kodydqqrlqvlr kvhwd ndur lwop dwd ahrwdl WCE CE sr krdw kCE ahl
ahrdwq kodydqr a p dnhhah1 Or p dnhhah ahlwddq p |os T U0nr r glwahrwa -dqnrl ylh
oxqr sr uwlfr p Olyxwrah dqqxw/ nxqlq ahrq vhwrlklq> ydwdwq dqnrl p |os
vxqqlwvkr khrp ddr/ mnd yrl nCEwCE mv nr kvhwd r q ahrd/ mnd hl r dh ydp llqd
a p dnhhah.

§ T U0nr glq yr l vkgCE hlp hunlm -kws-22z z z t U0nr glv l2hvxlyx, vlyxw r01
Nr slr lgdd kdxwq vlyxw q r v l v n d o l v n d q v h T U0nr gl n h q w C E n d o r g d d n r r gl 1

§ p h q q c e k o y d q q r l q v n r k v h v h q r d n d u r l v n d q c h w z

§ 4 k p 0 5 a p d n h h o n p h u l w 0 5 n x q n l g o n g | n v l o e 0 5 0 5

\$p\$ d d w r w o e n h q v d | q n c f w c e 4 0 5 r s s l w q v d - u l s s x h q n r k v i n g h w c f | g h w c f r x o x o d

§ nr xoxd woenhvd | q nCEwCE 406 wqld ulssxhq nCEwvd q odhxghwd

Soal hwaq n xqnlq onq sur vhwlr vxxghwlr nr qdvdhp **CEBACE**

~~enq~~ | nvl(~~enq~~, nr qd) | nvl(~~enq~~, 0) E433,

Ş y h u d d q w o n m d d h p s l l q y x r v l q d q h l w q n d u x h w d l P l q n C e l d p x x v n m d a d h w w d
r d | n l o e C e l w o f q v s k w q x w d y r l q d d s r k v d q l l g h q v l l o e

\$kdydqr wyr l gddq wddwd Wludkdydqr m Gdhwp CEE - Wludl,

\$n0f000001 yhm| p s0Ew0e ulw0d0qxw#kwsv-22p hwd0d0dlw112ulw0d0p hwd

www.vodg Elugdi hVxr p hg qCEhp | nvlq yhm d q x ng p hw CE / nvn hq

kwsv22zz z z1eludi h1l2z sf r qvhw2xs o dg v253492382p hwdw/vdardk0eludi h1sqi

duylr lqvl=

§ vhx uvd dg vx qvld hvll ylvxxwd

§ 174(1)(b) of the Penal Code provides that a person who is found guilty of an offence under the Code shall be liable to a fine or imprisonment or both. The Code also provides that a person who is found guilty of an offence under the Code shall be liable to a fine or imprisonment or both. The Code also provides that a person who is found guilty of an offence under the Code shall be liable to a fine or imprisonment or both.

\$yhudvuyrlqwr-4 kp Cq Cqzhwdvuyrlydwrlwng vconhqvnd Cqdhvr wd,1

§ 87(2)(b) xv nr h d q x nr q s CE/w/CE

[www.ovkmlp xnvæghq nd wlp lqdðghq xnr qdr sslp lqh](#)

† whumae v duhur f k ghudv dyvp loaeu

Mwf d Eur dvr f k Fdp loe Mkdvr q

P Žo

Hdyhq i Žulqvinhu l † whumae v yduhudagh dyvp loaeu r f k nxqvndshur p r dnd duhur f k ghudv dyvqdgvi oek Žedaghq1 Hdyhq oE vj nOEqd l j hq r dnd r u j dqlvp hu r f k ndq i oenodud kxu i oEgulgaj du l dyvp loae s Žyhundu r u j dqlvp huqdv oghudyvqdgvp oedj khvhu l Hdyhq i oew Žu r f k ndq uhr qhud nulaj vdp edqghwp hooq † whumae v duvp Žaj idag r f k vobk dnd Hdyhq j hv r f nv Ž p oedj khv dwoed vlvwlgwvhu r f k vldq nxqvndshu l duv OEqhgr p l vdp duhvhu p hg dvgud hdyhu l Hdyhq ehndqvdu vj p hg vy Ž dy gh j o edo p Ždq i oek Žoedu xwyhf ndaj / qu l 47 K dy r f k p d l qd uhvuhur f k qu l 48 Hnr vj wlp r f k elr o j lvn p Žaj idag1

Dnlylvhuqv p Žaxssi | oho h hq d j w J uxqghuqd i oE oE s oqhq i oE ghq j uxqg oE d qgh xvel oq l q j hq 5347 -Xvel oq l q j wlvhu hq 5347, =

Elr o j lvn nxqvnds r f k i oew Ž h v h

P 4=Hnr vj wlp hwxssel j j qdg r f k ixqrnvr q

P 5=Dum OEqhgr p

P 6=R u j dqlvp huqdv dqs d v l q l q j v l o v l q dyvp loae

P 9=Olyvp loae v ehv ygho h i oE du vdp p d v OEq l q j hq r f k duvp Žaj idag hq

Elr o j lvn d i OEq l j khvhu

P : =V OEq d q d x u y h v h q v n d s d j w OEq d q g h r f k i oew Ž vdp edqg

P ; =N r p p x q l n d m r q r f k vdp duhvhu

P 44=Gud v o x w d v h u / v l o E s d n x q v n d s r f k u d s s r u h u d u h x o d v

Dmlyghur f k y OEq h u l q j du

P 45=Glvxvhu d q d x u h q v p Žaj idag r f k ghv ehv ygho h i oE d o v d y d q g h

P 47=† ndp loae hgyhvhu q khvhu

Dnlylvhuq w o g h u n r p s h v h q v h u q d N4/ N7/ N8/ r f k N:

Dnlylvhuqv p Žaxssi | oho h hq d j w J uxqghuqd i oE j | p q d m h w oE s oq 5348 -Xvel oq l q j wlvhu hq 5348, =

K Žoedu dywlor f k j o edo v d q y d u

à Dqd vhu d r f k ehg o p d i oE g u l q j d u l q d x u p loae vdp w d w n OEq d v l o i d h v r h u v r p s Žyhundu ndp d i oE g u l q j hq r f k k r v d u g h q elr o j lvn d p Žaj idag hq vdp w i oew Ž y d g h l q q h e OEq i oE p loae r f k p OEq n d j y h u n v d p k h v

VX VVX OVX vnlp xnvhoqhq rd w lp lqqd oqhq xor qdr ss lp lqhq

à FhqudwlqqhZol nxuqh lqqheCEnxqvnds r p r y dqlvp huqdv dqsdwqlqj wlvq
r p j lqqlqj r f k ghudv xveuhqqlqj 1

J hqr p i oedqgh

Dnilylvlnq unvduvlj wchdyhul Žunxuhud: rfk ; l ghq j uxqgqf d qgh xqghyvlqlaj hq1
, yhq | qj uh eduq ndq xwied dnilylvlnq p hq gŽ eoe wyŽlj khwj udghq včndv rfk ir nxv
dj j d sŽ hagdwhwi Ždoyčnčgd duhul Dnilylvlnq sdvdu čnq i oej | p qdhw i oej nxuhq
Elrσjl 5/ Hnrσjl rfk p l oed Dnilylvlnq ndq gŽ d qyčgdv vr p l qdghqlaj včglvnxwlr qhu
nulaj sr sxčmr qhuqdv r y dqlvp vdp kčnqdv rfk hnr vj wlp hqv wuxnxuh yčnqhundq rfk
ixqnvr qhuvdp wr y dqlvp hagd d qsdwqlaj včvlg r p j lyqlaj rfk ghudv xve hqqlaj 1

Drivylvlnq ndq xivcedv Qf qhmqlvj uhudwl vdp duehvn p hg p r ghwp Žaxqghuylvqlqj hq gŽ hdyhuqd vnulyhu hq dj xp hqvludqgh vln vl vdp edqg p hg drivylvlnq1Ghq dj xp hqvludqgh vlnvlnq vr p ehkdagdu ‡ vlnurav elr σ jlvnd p Žaj idq kdu gh j σ edal p Žhq ioe kŽædu xwfhndqj vr p xvj Žaj vsxqrvt

Dnlylvlnq ndq jhqrpioedv eŽgh lqrp kxv l ndwuxp v l oerfk xwvp kxv l Vnhu
jhqrpioedqghw xwvp kxv ehkoshu lqvn vdp p d vBhukhw ldnwlv ydg jCdu
ydwlnqdyCgglqj hq1Xwvp kxv ndq ghwgrfn ed vyŽduh dwkd v l oJ Žaj v l o v l oCEndj wp hg
ydwlnq1Dnlylvlnq ndq jhqrpioedv ylonhq vlg sŽŽhwvp khowr p p d q j oeghq lqrp kxv
p hq r p ghq j oev xwvp kxvCv l qj kowhduhvha yŽueCv l

L d h v o e r p d u h u d r f k g h u d p l o a e d y v p w e l j j d a g h w d y p l q l d y p r g h o u x v i o e v l j x s s h u s z w h h o h u i l u d h y h u r f k x s s v n d w v v y z l o e w h d m i r q h u l i d a i d h v o e j o e v y l d l q v u a h w x v r p k x v i l q q v g h u v u n d w l q v u a h v i o e l q g h o h q O E g z j r f k g z n d q w o j z j w o O E k d q g e o n h u y d u l h q o e l q j l i d o p d q y l x v i o e d h v y l v n q x q g h u h q n r w a l h v i g n d q p d q j h h y h u d w o j z j w o O E g l d l q i r e o g o g h u d u h u d w h e l o j d 4,1 l o e d w v n u y d g h q d j x p h v u d b g h v r v n q r f k s u h q v u d u h x o o l n q n u O E v x s s v n d w o l q j y l v y z d m i r q h u v o e

P d w h u l d o r f k x w u x w q l q j

41 Oap lqhudg ndud sZf wnu medwEj hq p hg vdkdovj ughlqhvg lqvawelag 4/ elaj d 6/
wruon D61 SŽ ndudq ilqqv p hg iEj dgh sxqnu lqvawel gh r p jlyqlaj du ylonv
duwop p dqvOvqlaj vndehwE p dvl

51 Qap lqhudgh el qhus žydw hqr uj dqlvp hui žq r ond ghoddy ž w h u r o e / el q 5, 11 o e a j wylv
v r o e a j d / e a ž v a j / w u n / o e r q p d q h w v a j v a j / k d y w r o s d q / o e h u r o p x w a d / d e e r u h /
k d y v o e j h o y l n d h v o e w a d g v q o e n d / v a j e r u h / k d u l l q a y d m y d d u h u = y d g g u d p x w a d /
n l q h m v n x o k d g v n u d e e d / y d u p x q q d g v p o e x o w / q r u g d h u l n d q v n k d y v e r u w p d u n /
v d g q p x w a d 1 - D u n r u i o e a p l q h u l q j / e l q d 5,

61Ghq glj lwd i Ck dger nhq Clyhwl kolyhw Ck hq j udlw dssndw r q vr p ndq dggdv qhu sŽ
p r elndir qhq 1Hdyhuqd ehkoshu Ck hq kd wq Žaj vlqlqyhuqhwi oei dhwv o r p duhuqd1
Dduhuqdywi Ck dgeoenhu hduhulqir eadg +h elaj d 4, gCk r u j dqlvp huqdv nudy sŽ ylnhq
w/s dy dnyqdy p l oegh ioehgudu l i u Ž d r p wh 1 ydwhqgnas rfk er whqioek Ž adqghq
+lqqdqgh ydwhq/ vdgger whq/ dner whq/ p mner whq/ ndss0 r f k whqer whq, ilqqv1

Dn wylwhw

Dnwylwhw j hqr p ioav vr p hwj uxssduhwl 1Hdyhuqd ghaw lq l j uxsshu sŽ wh hdu i | ud
hdyhuqdy r f k ydwh j uxss yCk hwhwr p u Ž gh sŽ ž whwruedw d +h elaj 4 r f k elaj d 6, vr p
gh yl omeed p hg 1 Gh i | ud r p u Ž gh qd vr p ilqqv lqsulfndgh sŽ ndu d q kdu ydov xwhq d j w
vddqlvwhq v Ž dw ž whwruedw Ck hq v vdkdovj udghqwl/gdj wwd i u d j Ž 1 D d i | ud s dwhu
uhsuhqywhu v Ž xqgd p l odu p hg r dnd vdkdov r f k s dwhuq d ilqqv l Er whqylnhq +3/5 (
vdkdov/ l lqynd ylnhq +3/: (,/ H j hqvdj d ž whwruedw +4(, r f k Ndwhj dw +5(, 1

Ydwh j uxss vlghaw hq exqwp hg ap lqhudgh elajnr uws Ž r dnd gnu0 r f k yCk dwhu vr p

71P dnu d boi oedw el j j d p lql d w / up r ghaw =

Elaj 41 ž whwruedw Ck hq v
vdkdovj udghqwl +Elaj = Sxedf
gr p dq,

Elaj 51 O d p lqhudgh dwnr w l Gh vp Ž dny Ck gvl p lql d w / up r ghaw j j hw l

WX WX OVX wlp xnvhdqghq rd w lp lqqdæghq xnr qdr ss lp lqhq

sŽuCEdv l ± wlvwroq +h elqđ 5 rfk elqđ d 5,1 Hdyhuqd l j uxsshq j Žu včw p dqv lj hqr p nr ulnq rfk vdu uhgd sŽ l kxugqd p lœbu duhuqd ndq iœhnr p p d rfk ydu l ± wlvwroq gh sŽuCEdv vdp wylœhwghu dv qr ugđj dwn iœhnr p wv p Źgh CEi GCEi vhu yCEi gh vhgđ xwhw dqvobduhu vr p gh yhw dwnđq iœhnr p p d l ghwr p Źgh gh ydwr p vlvw rfk vr p nœd dy ghq vđqlvwr p gCEi Źghul GhwCEi œvnyCEi vdwgh yCEi duhu i Źq r dnd r Źj dqlv j uxssu wh{ 1 ilvndu/ nuCEi gnu/ qCEi hgnau/ d j hur vy iœ dwi Ž hq eCEi h rfk p hud yhundj khwvr j hq elqđ dy vlvw p Źgh l

QCEi duhuqd CEi ydgđ vndœ hdyhuqd j œd qr j j uđqđh i d h vœœ r p ghwd duhu l Gh vndœv uhgd sŽ ylœd nudy gh r dnd r Źj dqlv huqd wCEi hu sŽ vq dyvp lœœ Kxugqd er wlvq/ shu iœhgudu gh 0 nœss0 rfk wlvqer wqdu hœu p rœnd er wqdu l iœhgudu duhuqd ghwœssqd ydwhq p dvr uqd/ shœj l d h q/ hœu wlyv gh eCEi h l wuđqj r qh q/ dvr uđh q 1 Nœdu gh dy gh wliid iœœ Źœđqghq vr p Źghu sŽ gh j uxqgd nœsser wlvq hœu huœxghu gh j uxqgd p rœner wlvq hq eCEi h dyvp lœœ i œ duhuqd l

Qhgdq qŽ Źd iœœœj sŽ l qvhuqhw lgr uvr p kdu lqir up dlv r q r p ± wlvwroq rfk ghw duhu= kwsv=22z z z f k d y h v t x 2 d y h 2 d u h u
kws=22z z z s 1 p s d l w r 1 l 2 p l œ n 2 k v p œ x v œ u n d u r k v p
kws=22z z z t x r q v s r u w l f r p
kwsv=22z z z z z i v h f g q 1 w j j h u l v k f œ x g 2 x s œ d g v 2 5 3 4 < 2 3 4 2 q d j u d j d q d j d j d f v h u r f k 0
g n u 0 0 w h u m n q t s g i
kwsv=22œ d l f h j h t Źj 2 w y 2 d y p l œ n h u 2 œ d i d h v œ d y h u 0 0 w h u m n q 2

Hdyhuqd eljj hu gCEi vhu xvj Źh qgh i Źq ghq lqir up dlv r q gh kdu hq vŽ q d x u w r j h q p l q l d l y p r g h œ v r p p œ d j w y d g j CEi hu vđqlvwr er wlvq/ s/ ydwhqgnœs rfk duw p p dqvCEi qj iœœr p Źghw l i Źj d +h elqđ 6,1

Ydurn j uxss eljj hu hqgdw hq p l q l d l y p r g h œ p h q dœ i l u d dyvp lœœu eœœ œd suhvqvludgh l hq nœw l l œœ p l q l d l y p r g h œ l j j h w e h k œ v y d w h q r f k v d œ i œœ d w j œœd k d y w d w h q / r d n d p l q h u d œ n u g d u h u i œœ d w v n d s d k d y v e r w h q r f k nœœ g CEi vœœ d dyvp lœœ i u d p wœœ v l SŽ nœœw xwlgd p CEi hu hdyhuqd xwghwxqj hi CEi j d gnœshw p hg wœv k 1 Gh p l q g h œ p l q h u d g h d u r n u l n q s œ f h u d v h g d q l q l p r g h œ q vŽ d w y d u r n d u i œœ h n r p p h u s Ž ghq iœœ duhu p h wœœ s d j d s œ l v h q 1

Elāg 61 H(ģp shosŽ hq p lqldw/ up r ghævr p suhvqvhudu hq wādg p hg j uxqg nāss0 r f k
wāqer wāq - Mā koē hu l elāghuqd, vr p oshj Žu l hq j uxqg p nāner wāq - Mā yCē wāu l
elāghuqd, 1

Suhvqvwā q dy uhvxoāw

Q Cē p lqldw/ up r ghāhuqd Cē nāud p hg uCē wādg l wāssŽ k dy yd wā h w r f k dūhuqd l qv d wā l uCē d
dyvp lādu ugr j oē hāyhuqd i oē v l qd y d p hg vā d j xp h q v l H i vāu suhvqvwā q huqd nāq
hāyhuqd i oē vā j ylv glvnxvāud r f k u h i d n vāud oshu kxu gh r d n d dūhuqd l qv h u d j h u d u p hg
y d d q g u d r f k y d g v r p v n x o h k Cē g d l i d o h q d w p l q v n d g h h o h u o e d g h l d q v d d D u h u q d n d q
r f n v Ž d y Cē g d v i oē d w h(ģp s d i l h u d i oē Cē g u l a j d u l h n r v l wāp y l o n d e h u u s Ž v h(1
n d p d i o e Cē g u l a j h q 1 Y l o n d d u h u n r p p h u d w i o e y l q q d / y l o n d d u h u r x v e h g l a j v r p ū ž h q
n r p p h u d w i o e n n v d q r u x w r f k y l o n d d u h u j | q q d v d y n d p d i o e Cē g u l a j h q 1

Dnlylvlnhv xwvCghulqj =

à hñyhq kdusssqŽwgh xsswCghd nxqvndsvOrfk iCghj khwp Žñq
 à hñyhq xssylvdugh nr p shñqvhuvr p nuCghv iœdñlvlnhv
 à p lqlldvup r ghñq Cghndur fk suhvqhvdg
 à vñCghOrfk ndp ulxwvCghulqj

I r uvdwehkdqgdqj dy vñp dw

Dyvxvqlqj vylv ndq hñyhqd vnlyd hq dñ xp hqvñvdqgh vñ(wrp ð wñuñœv elr ð jlvnd
 p Žñj i dñ1 Vñ(wñq ndq xwvŽñ i Žñq ghwmñuñwqgh rfk i hp wñqgh j ð edñ p Žñwñœ k Žñœdu
 xwñf ndqj / ghw ylœ vCghd Cghdy rfk p dñqd uñxwñu rfk Hñrvñ wñp rfk elr ð jlvñ
 p Žñj i dñ1 CghXssvñwñq j œv Cghqñlvñj uñdwl vñp dñehñ p hg p r ghup Žñxqghuylvqlqj hq
 hñu dññqdñwyp hg ilqvndq hñu hñj hñdñ1 Qhgdq iœvñj sŽ dñyCghgedñd Cghñdu r p
 kdyhw elr ð jlvnd p Žñj i dñ1

kwsv=22z z z 1 ð edñp dñq1 h2i uñ r uñydñ kwsv=22edñf hñ hñ uñ 2w2dyvp lññu2edñ dñvñ0
 dyhñ0 wñuññq2
 kwsv=22z z z 1 kdyhñq2Bj @583
 kwsv=22z z z 1 kdyhñq2dyhñ2lqghñ ð vñBp r gh@lvñdññj r uñ) flg@dñq
 kws=22z z z 1 kdyvp lññlqvñwñvññ2glj lvñdñwñw247<6247<6: 58bññi dññi uñ p dñghbdññuñ
 sgi kwsv=22z z z 1 kdyhñq2Bj @69

I œvñj sŽ œvñj d glvñxvñr qvñp dñ

0 ð wñuñœv vCghdñ B-wññ 1 dyuqqlqj vr p uñghw wñuññ vñk dññ gñs/ hñwñ i lñlqj / wññ lññ
 elr glyhñvñw

0Ydñ sŽñhñdu vñk dññq I ð wñuñœv B
 0Ydñ œxsswñŽñvñ1gœgd kdyver wñdñB
 0Kxup Žññ wñuñœv lqñ B
 0Kxugdñd dññuñ lqñv ghñl ð wñuñœv B
 0Nñdñ i Cgh p dñgh dññuñ œeed edñqvñq I ð wñuñœv B
 0VñœeŽñwñ lññhv exññu dyhñwqghukdyvñ vñdñB

Vñ hñylqwxñvñr qhñl elñj d71

NŌŕ u

Qlyhwł kđyhwl Duhwl X1Euhqqhł/ D1Wgαqg/ N1Ylnαqg/ Q1f wαdqg Fdshłŕ 1KŌŕ wđg
46B1534<1?kws=22z z z 1kđyhłq2đyhł2duhłA

Xvelđqlqj włyhohq 53481J uxqghuđiŕej | p qđMhwŕŕ sđq 53481l ŕehvnulivhurfk
đqylvqlqj du53487; 1

?kws=22z z z 1sk1l2gr z qŕ dg24: 7; 86bj uxqghuđbir ŕbj | p qđMhwŕŕ sđqb53481sđgi A

Xvelđqlqj włyhohq 53471J uxqghuđiŕej sđqhq iŕghq j uxqgŕŕj đqgh xvelđqlqj hq
53471l ŕehvnulivhurfk đqylvqlqj du5347=91

?kws=22z z z 1sk1l2gr z qŕ dg2499767bj uxqghuđbir ŕbŕŕ sđqhqbyhunnr nŕndvx1sđgi A

Elđj r u

Elđj d4DŌF1H{hp shosŽlqir eđg ŕyhuf włhunnŕŕv duhł

Elđj d51Dunnr ŕwiŕŕŕŕ lqhlqj

Elđj d61ž włhunnŕŕdŕŕŕj hq vđŕkđŕv

Elđj d71Hđylqwxnvlr q

«] vr đgr v P%ŕŕŕ q FF E\ ŌD 6B

VXVWX OVXvmlp xnvhđqhq rd w lp lqqđđqhq xŕr qđr ss lp lqhq

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Zedwv|1Sxedf gr p dq1

« Wp rqlwFF E\ 0D 5B

Kdu+K|pdxvk|pdxv, « J vrgvP%wq FF E\ 0D 5B

Kdu+K|pdxvk|pdxv,
« J vrgvP%wq
FF E\ 0D 5B

Kdu+K|pdxvk|pdxv, « J lthVdq P dmlq FF E\ 0D 5B

Kdu+K|pdxvk|pdxv,
« J lthVdq P dmlq
FF E\ 0D 5B

VX\WVX OVX\WVlp xnvhdqhq rd w lp lqqdqqhq xon qdr sslp lqhq

WXVWX OVXVWlp xnvhaqhq rd wlp lqdaqhq xnr qdr sslp lqhq

Vp Žslj j -Sxqlwvsxqlwv,
Elq=kwsv-22wyp ž lnshgldf ų 2z ln
Elq=Sxedf gr p dq

Vžqj ahh-ų rufhvylsduv, « Mddq l dkuedf k FF E\ 0D 6B GH

Vžqj ahh-ų rufhvylsduv,
« Mddq l dkuedf k
FF E\ 0D 6B GH

J œ -Vdghuœflrshfd,
Elœ=Sxedf gr p dq1
zzz1rrgiuhskr wvfr p 2

Deer uh -Shfdioxylmiv, « J hVKdl lvk FF E\ 0MD 6B

Deer uh -Shfdioxylmiv,
« J hVKdl lvk
FF E\ 0MD 6B

VXVWX OVXvmlp xnvhdqhq rd w lp lqqdøqhq xœr qdr ss lp lqhq

Když se Edvard, « I když jsem upp
FF E\ 0D 5B

Vndus vlc + vsuduv vsuduv,
« Kdqv Klodz chuw
FF E\ 0MD 7B

Eāžāj + xfxvyhfxāxv,
I r w = k w s v 22 z z 1 r w d h x v h q 1 h 2

ī ē d g x v p r u x d, « S a m i n J i m e h u F F E \ O D 7 B

W u n + J d g x v p r u x d,
« S a m i n J i m e h u
F F E \ O D 7 B

VX V W X O V X v n l p x n v h d q h q r d w l p l q q d q h q x o r q d r s s l p l q h q

VX\WWW 0VX\WWW xnvhaqhq rd w lp lqqdaqhq xon qdr sslp lqhq

V1Sr vkr yhq1QR RD/ J thdw
Oahhv Hqylur qp hqwaUhvnduf k
Oder udw r q
I r w q=Sxedf gr p d q

Kr ssnuEd +Frshrgd, « I udqn I r { FF E\ 0D 6B GH

Kr ssnuEd +Frshrgd,
« I udqn I r {
FF E\ 0D 6B GH

NdwiŽudj -Qrgædd, « PluhdEhurvl r ulw FF E\ 0D 7B

NdwiŽudj -Qrgædd,
« PluhdEhurvl r ulw
FF E\ 0D 7B

J ůŮK dñkrhuvj ů sv,
« Dqguhv Wshvñ 2 z z z ßkr w Qdñutñw FF E\ 0D 5

J ůŮK dñkrhuvj ů sv,
« Dqguhv Wshvñ 2 z z z ßkr w 0
qdñutñw
FF E\ 0D 5B

WVWVX OVXwmlp xnvhdqhq rd w lp lqqdæqhq xñr qdr ss lp lqhq

FF E\ 0D 7B

Vžj er uh -Sv p fkl qvpl dduv,
« K d v K l o z d u w
FF E\ 0D 7B

w d q d o w d u d, « K 1] h o FF E\ 0D 6

V d q g v q C E n d -O l w u l q d o w u h d,
« K 1] h o
FF E\ 0D 6B

VX V W X O V X w l p x n v h o q h q r d w l p l q d o q h q x o r q d r s s l p l q h q

Vžqj vžqj +ł xfxvvhudwv, « Włp r qłvw FF E\ 0D 5B

Vžqj vžqj +ł xfxvvhudwv,
« Włp r qłvw
FF E\ 0D 5B

Wdągnudeed +F duf ląxvp dąqdv, « K dąv Klóhz dhuw FF E\ 0D 7

Wdągnudeed +F duf ląxvp dąqdv,
« K dąv Klóhz dhuw
FF E\ 0D 7B

« D w l d v u x e h q v , « K d q v K l o z d h u w F F E \ 0 D

V r o s v f d « D w l d v u x e h q v ,
« K d q v K l o z d h u w
F F E \ 0 D 7 B

d q h w « D x u h d d x u l v d , « F d u e r q Q \ F F F E \ 0

‡ u r q p d q h w « D x u h d d x u l v d ,
« F d u e r q Q \ F
F F E \ 0 D 5 B

W X V W X 0 V X V W l p x n v h a q h q r d w l p l q q d a q h q x o r q d r s s l p l q h q

Vhuxeevncggd+Sdmfkkl|vduwv, « Hvt xlo FF E\ 0D 6B

Vhuxeevncggd+Sdmfkkl|vduwv,
« Hvt xlo
FF E\ 0D 6B

UagvsCgd+Sdmfkkl|vduwv, « KdqvKlchz chuw
FF E\ 0D 7B

UagvsCgd+Sdmfkkl|vduwv,
« KdqvKlchz chuw
FF E\ 0D 7B

VX\WVX OVX\wlp xnvhdqhq rd w lp lqqdqqhq xon qdr ss lp lqhq

Slj j ydu+frskwkdpxvpd lpxv,
« Oxf Yldwrxu2 kwsv=22Oxfql{ 1eh FF E\ 0MD 6B

Slj j ydu+frskwkdpxvpd lpxv,
« Oxf Yldwrxu2 kwsv=22Oxfql{ 1eh
FF E\ 0MD 6B

Vn +J ruhj r qxv oyd h xv, « Dssd5333 FF E\ 0MD 6B

Vn +J ruhj r qxv oyd h xv,
« Dssd5333
FF E\ 0MD 6B

WXVWX OVXWmlp xnvhaqhq rd w lp lqdaqhq xon qdr sslp lqhq

J Cgd +Hr { xflxv, « Nh rlm FF E\ 0D 6B

J Cgd +Hr { xflxv,
« Nh rlm
FF E\ 0D 6B

P œwUxlvuxlv, Dxvr u=NduhSxedf gr p dq,

P œwUxlvuxlv,
« Dqguhv Kduo
FF E\ 5B

VXVWX OVXvmlp xnvhdqhq rd w lp lqqdøqhq xør qdr sslp lqhq

Lg -Chxf lv xv lgxv, « Ylugli oyxv FF E\ 0MD 6B

Lg -Chxf lv xv lgxv,
« Ylugli oyxv
FF E\ 0MD 6B

Euf hq -Deup lveup d,
Dxvkr u=Nduhms Sedf gr p dq,

WXVWX OVXWmlp xnvhaqhq rd w lp lqqdaqhq xon qdr sslp lqhq

VŽj vqČl +M/ qj qdMxvVskd, « Ur ehur Slor q FF E\ 0D 6B

VŽj vqČl +M/ qj qdMxvVskd,
« Ur ehur Slor q
FF E\ 0D 6B

WČj p Čl +J dppduvxfw, « Kdqv Klčz dhuw FF E\ 0D 7B

WČj p Čl +J dppduvxfw,
« Kdqv Klčz dhuw
FF E\ 0D 7B

VX VVX OVX vmlp xnvhčqhq rd w lp lqqdčqhq xor qdr ss lp lqhq

Lvkdyj ůŹxj j dq Vdggxld hqwp rq, « Dp dnxkd FF E\ 0MD 7B

Lvkdyj ůŹxj j dq Vdggxld hqwp rq,
« Dp dnxkd
FF E\ 0MD 7B

Sxqj ůŹŹd -P | vlv thdf vd, « Shukr ō FF E\ 0MD 6B

Sxqj ůŹŹd -P | vlv thdf vd,
« Shukr ō
FF E\ 0MD 6B

VX\WWW OVX\wlp xnvhdqhq rd w lp lqddqhq xnr qdr sslp lqhq

Vosydwqj Źxj j d -Dvħv dt xdlf xv, « Fkdun Mkds FF E\ 0D 7B

Vosydwqj Źxj j d -Dvħv dt xdlf xv,
« Fkdun Mkds
FF E\ 0D 7B

Ydqdj Źxj j Źxj j d -Lgrv d edokfd, Dxvkr u=P dun Eo{ vhu -Sxedf gr p dq,

Ydqdj Źxj j Źxj j d -Lgrv d edokfd,
Dxvkr u=P dun Eo{ vhu -Sxedf
gr p dq,

VX VWX OVX vmlp xnvħdghq rd w lp lqqdghq xnr qdr sslp lghq

Ydqj wzqj UEd -Scdp r q dgvsuxv,
« Duur x}
FF E\ 0D 7B

‡ $\text{wump} \times \text{wcd} + \text{P dir p d eck f d}$
 Elg = Sx edf gr p dq

Ydqgudp xwæl +Gufhwqdsrðpruskd,
Elg=Sxedf gr p dq

Ežp xwæl +P |vævrgxdv, « Hp ċ nh G•qhv
FF E\ 0D 7B

Ežp xwæl +P |vævrgxdv,
« Hp ċ nh G•qhv
FF E\ 0D 7B

VX\W\X OV\X\mlp xnvhæqhq rd w lp lqqdæqhq xør qdr ss lp lqhq

mp xw@+fhdwghupdj@xfp, « P xv xp ghVx@xvhFF E\ MD 61

KrE p xw d F h d w g h p d j o x f p ,
« P x v x p g h W x o x v h
FF E \ M D 6 B

Ežp xwcd +Wkrgr{ xviacyldm, « P lfkdbP d, dvFF E\ 0MD 7B

Ežp xwcd +Ktrgr{ xviayldm dv
« P lfkdbP d, dv
FF E\ 0MD 7B

† ur qp dqhwDxuhd dxuhd, « Doh{ dqghuYdvhqhq FF E\ 0D 6B

† ur qp dqhwDxuhd dxuhd,
« Doh{ dqghuYdvhqhq
FF E\ 0D 6B

Vdip vřj -Xgd lqhwlddv, « Hf r p d h2R v f d uEr v
FF E\ 0D 7B

Vdip vřj -Xgd lqhwlddv,
« Hf r p d h2R v f d uEr v
FF E\ 0D 7B

VX\W\X 0V\X\W\p xnvhdqhq rd w lp lqqdqqhq xonr qdr ss lp lqhq

‡ whurap xwæ-Olp hf ræedoklf d, « Kdqv Klænz chuw FF E\ 0D 7B

‡ whurap xwæ-Olp hf ræedoklf d,
« Kdqv Klænz chuw
FF E\ 0D 7B

WXVWX OVXVmlp xnvhædqhq rd wlp lqqdædqhq xær qdr sslp lqhq

ElonC=kwv=22vyp 1z lnshgldf u j 2z ln2l lchur sh1sj KQf wlg ghq 5819534<
Elon=Sxedf Grp d1q

P Žo

Xwy O Eug hul q j

Xssvwhq lqoE qdg

W_g

Xssj livnq xwvce j ukssylv p hg wh hohu i | ud hdyh2j ukss1l dhvce vdp wel j j dqghwdy
p lqldlv p r ghahq xssvndvdl vl hq gxeehohv r q1Gx i Žug0Exvshu v Ž dnv r qhus Ž glj dw
i 0glj w0d ghq dj xp hqvndagh vlv vlv v r p vndehkdagol ± whvncev p Žaj i daj1

P d whul d o=

Gx ehk^oshukd^o v^oi Ž^oqj v^oi o^oedgh p d^omulde=

§ Oap lghudg ndurd sŽž whurcedwCij hq p hg vobkdwj udlghavng wgdj wlgvdlw

§ Oap lghudgh eloghush Žydawgr y dqlvp hu-tdumr uy

§ Ghq gli lwa d i Ck dger nhq Qyhm kalyh v r p Qh q j u l w d s s n d m r q v r p g x n d q a g d q h u s Z p r e l a n h i r q h q 1 D a h u d m y n d q g x d a y C a g d g l i j d y i C k d a g e e n h u l

§1 ceidwe|jj dp lqlw|up r ghonq ehkoyhugx

0 dnu2p r65/ vdgq/ j uxv/ wlnq

OnCE/ khawj hqr p vnlqdj w

Ovxf k

Overview

Oydwng

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00Egduh #oervdolk dov xwOEqlqj du

Op Cw/ ghndqnuj dvr f k vsdmo

J h q r p i æ d q g h =

§ Y C æ h w r p u ž g h s ž ť w h u r æ d u d q 1

§ J Ž l j h q r p d u n r u h q r f k v æ l u h g d s ž l k x u g d q d p l æ b u d u h u q d i æ h n r p p h u l N r æ d x s s y d u l ť w h u r æ g h s ž u C æ d v d p w y l æ h w g h u d q r u g d j d w h i æ h n r p w r p u ž g h C æ l N d q d u h q i l q q d v s ž g h q s æ w q l y d æ B

§ Y C æ x w h w æ j r p d u h u i u ž q r d n d r u j d q l v p j u x s s h u l v æ h { h p s h o i l v n d u l n u C æ g n u r f k d j h u l v r p n d q i l q q d v l h u r p u ž g h 1

§ J æ i d h v æ æ r p g h v d d u h u l V æ j u h g d s ž y l æ d n u d y r u j d q l v p h u q d w æ h u s ž v l q d y v p l æ e y d j j C æ u v d æ k d æ w e r w h q v l s / y d w h q g n x s r f k æ s s h q k h v l

§ D q y C æ g d s s d n d m r q h q C i y h w l k d y h w h æ h u q ž r q d y g h q h g d q i æ h v æ j q d l q v h u q h w l g r u q d =

k w s v = 2 2 z z z 1 k d y h v l q x 2 d y h v 2 d u h u

k w s v = 2 2 z z z s 1 p s d u l w r 1 l 2 p l æ n 2 k v p æ x v æ u n d u n k v p

k w s v = 2 2 z z z 1 æ r q v r s r u w l f r p

k w s v = 2 2 z z z z z i v h f g q 1 w l j j h u l v k f æ x g 2 x s æ d g v 2 5 3 4 - 2 3 4 2 q d j u d y d q d j d j y d { v h u l f k g n æ u l l æ r w h u r n q l s g i

k w s v = 2 2 e d æ l f h j h t u j 2 w y 2 d y v p l æ n h u 2 e d i d h v æ d y h v l æ u r w h u r n q 2

§ E l j j v h g d q h q v ž q d æ x u r j h q p l q l d y l u p r g h æ v r p p æ t j w x v j Ž n g h i u ž g h n u d y d u h u q d q l y d æ w æ h u s ž v l q d y v p l æ æ V æ k d æ h q v n d y d u l n r u h n w d n d v Ž æ r w h q v l s h q 1

§ Q C æ d y v p l æ æ C æ n æ u s æ f h u d x w g h æ p l q h u d g h d u n r u h q s ž v l q d u æ v æ s æ l w h u l

§ S ž n C æ h w x w l g d p C æ h u q l x w g h w x q j h i C æ j d y d w h q g n æ s h v l

§ I æ æ h u g h q s u h v h q v æ l r q d y d u h u q d r f k g h u d v d y v p l æ æ

§ V h u l y d g C æ h i v h u h q d j x p h q v h u d q g h v h { w r p ť w h u r æ v æ l r æ j l v n d p Ž æ j i d æ 1 V h { v h q n d q x v j Ž i u ž g h w i m u r q g h r f k i h p w r q g h j æ e d æ p Ž æ h w i æ æ k Ž æ d u x v y h f n d q j / g h w y l æ v æ d æ K d y r f k p d l q d u h x u h u r f k H n r v j w h p r f k æ l r æ j l v n p Ž æ j i d æ æ l

Q h g d q i æ v æ j s ž d q y C æ g e d u d C æ n d u r p k d y h w æ l r æ j l v n d p Ž æ j i d æ 1

k w s v = 2 2 z z z j æ e d æ p d æ h q 1 h 2 i u d j r u d y d 2

k w s v = 2 2 e d æ l f h j h t u j 2 w y 2 d y v p l æ n h u 2 e d i d h v æ d y h v l æ u r w h u r n q 2

k w s v = 2 2 z z z 1 k d y h v l q x 2 B j @ 5 8 3

k w s v = 2 2 z z z 1 k d y h v l q x 2 d y h v 2 l q g h { æ v æ p r g h @ y l v æ l æ h j r u l f l g @ æ h q

k w s v = 2 2 z z z 1 k d y v p l æ n l q w l æ x v h v h 2 g l j l v æ d w h w 2 4 7 - 6 2 4 7 < 6 : 5 8 b v m n i d u l æ i u d p d q g h b d u h u l s g i

k w s v = 2 2 z z z 1 k d y h v l q x 2 B j @ 6 9

W X W X O V X v n l p x n v h æ d q h q r d w l p l q q d æ q h q x æ r q d r s s l p l q h q

Uhx owd

- § J uxsshq suhvqvuudu vlg p lqldvup r ghæ vdp w thgr j æ i æ vlgd ydb dy duhu p hg vchdj xp hqv
- § Glvnxvud kxug h r dnd duhuqd lqvudj hudu p hg ydubgud r f k ydg vr p vnxæh k ægd li dæ hq dwp lqvndgh hæuædgh l dqvæd
- § Glvnxvud r f n v Ž kxu duvdp p dqv æ l qj hq hyhqvæhæv ndq s Ž y hndv dy hq ndp d v æ æ g u l q j
- § Ghq dj xp hqvudqgh v n f v n q e l j j h u g x s Ž g h w Ž j æ edæ p Ž hq i æ k Ž æ du xvyhf ndqj qu147 K dy r f k p d l q d u h x u h u r f k q u 148 H n r v l w n p r f k e l r æ j l v n p Ž a j i d g 1

N æ u

Qyhw l k d y h w l D u h u l X 1 E u h q q h u / D 1 W g æ q g / N 1 Y l n æ q g / Q 1 f w u d q g F d s h w æ 1 K Q æ v æ g 46B1534<1? k w æ v æ 22z z z 1 k d y h w l æ x 2 d y h w l æ d u h u A

Pr qldd lghq r sslp lvr nr qdlvxxv=

NhxuxwhnOE

Vdqqd Ylwdqhq rd Hurd Vr ul

Mr k g d q w

WCE OE r qldd lghq r sslp lvr nr qdlvxxv r q v r v r v r v r | k v r l w r o s v O E N h x u x q
| k v r q O E n r x o x q | O E r x o x q r d P O E v O E N r v n h o q | O E r x o x q n d q w d v h l w h p O E r n d o l v o h 1
NhxuxwhnOE q q r l q 63 n p s l w n O E y l N h v n l O x r p h q r d S l u n d q p d d q u d o o N h x u x x
v r d w h h r O E y h q s r k m l v s O E v O E n d P O E w O E n d O E v O E v O E O E p r q l d d l v h q
r s s l p l v r n r q d l v x x g h q y r l w r v r v o d v r y h o x y l q r v l q p l w O E k d q v d r O E y h w O E
P r q l d d l v h q r s s l p l v r n r q d l v x x v h q | k g l w h w l l q y l l v r s s l d q h w e n x y d v l g h / n O E v o e
e l r o j l d / d i n x q v d r d x v n r q v r 1 N h x u x w h n O E d k h w d n O E v n o l l q n x q n l q r s s l d q h q v x q q h o d /
h u d w O E n h p d s O E v O E d O y l l n n r d h l r o x v l

R s s l p l v r n r q d l v x x v d n r l n x y d v l v h q r v x x g h o d / m o l q v h l w h p O E r n d o l v h w p h q l y O E
r O E y h q u d q v d d q r d y d n x y d l y d w v h n O E p d v h p l d h w O E n l v l v n r k v d l O x r n d w d y d n x y l h q
s r k r d o d v k v l l q p d o d x v v d s l l u x w x v | n l q v d | k g h w O E s d l q n d q w d l

Q h v h l v n d x r n d w r m l o d n O E v l o e d n r l v n q l v h q v o e r v x x g h o d /
v n l y O E h o n x x q d n d q d y h g h q q O E o s y l | w O E p l w d y d q
v h f f k l O h y | q 1 R s s l d w v k d l y d w r d p d o d l y d w y d n r l v h n l
s | o e h O E 63 f p k d o d v r d o d d q o y l q / n l l q q l w l y O E v h q
q d u x l k l q r d o l w r l y d w s d q r n l v l d v n l y h q s d o l v h q n x y d 4, 1

N x q | k v h q v O E q h o e v h f f k l O h y | O E r o y d p l l q d / d n r l
e l r o j l d q r v x x v = y h g h q d o d v x v n l p x n v h w d v n r l v x n v h q d r o
r w d y h l q O E v h l O E h u s x r d o d N h x u x w h n O E n d v x v n l d q l l w O E
q O E o s y l | v y O E / k d n / y d k v r d y x x v / v d p h x v r d s K 1 W h g r w
n h u O E l l q | k v h q H s l f r o h v s O r y h o x n v h q d y x o d l

Nxyd 41 Vh f f k l O h y |

E l r o j l d q v x q q h o d y h l q O E v h w r v m l l q d l w u o d l
V d p p h n x l v q n l q q O E v h l O E p | o s r O E y h q v h o O E
r v d y h l q O E v h l O E r v m l l q d i n x q q d q v x q q l o d / n x q
r s s l o d o d r o r k r h p d w d n l u n n r y h q h r x w d n x y d
5, 1 O r s x n l r s s l o d w x v x w l y d w x n r q q r q v x q q l o d
n l u n n r y h q h l g h q k l w r u d d q r d p h u n l v n v h q
N h x u x w h n O E N h x u x q p x v n r q q h w l y x l o d o e y l
v O E O E v r s l y d d p d l u d d d l R s s l o d w v d y d w p | o s
x v n r q q r q v x q q l o d d v n d u h o d n l u n n r y h q h q
k d x d p d o d d q v n q l l n d o d l

Nxyd 51 N l u n n r y h q h r x v x

v x w x o v x v n l p x n v h o d q h q r d w l p l q q d o d q h q x o r q d r s s l p l q h q

Vhxuddydvd wlvnlp sl nxydxv elr σ j lq yghqddwxwmlp xnvhw1

Vdyr lw hhw

Yghqddwxwmlp xnvhq vdyr lw hhw r d nhCECE| p sCEwCEVhw d yghq dggxwd rd hmwCEnhCEyCEVhw d ndvd1 Vlvnr lwxv r d sr kvld v| lCEp dkg r dwhq hur rhq vkwwd vhnCE p| o lkp lvhq wlp lqddq r vxxwdwxwmlp xwxo nvlq1 Rshwxxxqqlw p dwd elr σ j lq vdyr lw hhw rd vlvCEwCEchwlylvhw d wlvxwl dqqhly vhxuddyd#

Vdyr lw hhw= W / W / W43

VlvCEwCE= V4 / V5

Odw d d d lvhw= C8

Wf whx wx v

Yghqddwxwmlp xv vryhwx | CE r xoxq yhm elr σ j lq | kwlv hq1 Wwcnhqv| q yr l | kglwCEk| ylq p| o nhp ldd' vCEyghq dggxwd nhurydwp lwknvhw d wlyCECE hlvhw/ p| o nhp lddq1 P dkg r dwhw p| o dlnxqwd yr l dlvCECECE wmlp xnvhq hlp hunlml qr xwp d d yhm qCEwlvCEEndxhp sdd r d yhoCEnlunnryqhhoCEwd ndqr r vlnCE1 Vxwmlp xnvhq wlvxv ylh qr lq 405 r sslxqwd1 Mlv nCEwCE q ydq 78 p lq r sslxqwl r dvl klyCECECE r krhwCEl o r ndvd hghwCEwqqld rd dgdvl Hslfr dnf v8 Ōryhoxv ydp llml vhnCE wlvxwd d k| hwl vryhoxnvhq nCEwCE1 Mlv p dlvnr kgh r q ndxhp sdqd rd vlvwlp lvhq p hqh h hqhp p CE dndd' r q klyCE ydud ndvr lwxqwl p dlvwlvwcnhqv| q1 Nr nr wmlp xnvhq yr l vkgCExn r qd' hmp hunlml dlvud - nxyd 6, v d qCEwCEy| | wCExnxxq r wdp dwd ndnml wmlp xnvhwyr lgddq vnkqCEp| o o r ndvd1

Rsslw d wlv hq 507 r sslw d q k p llq - r ndvho vlv k p CEh d d p dqlwxyCEqhwy1 Hqhq p dlvnr q CEwCEsxkxlp p h o r ndvd CE r d yhq yghq dggxwd/ nCEp p h r krhwCEl rd mndqhq o r nnd d dlv k| sr lvhwq= P l d d qhq Nhxuxw hCE yghqddwx r q B P lwCE r vdw d Nhxuxw hCE r q sdv yghq d dlv B P lwCE r vdw d Nhxuxw hCE r q kxr qr lq yghqddwx B

§ Sxkhdq v d v d d wlv mwd r q

Hslfr dnf v8 Ōryhoxv

§, p sCE

§ P lw d d

§ Vx d w d y d d Mx o

§ Y d n r l w d s d h u d

§ s K d s d h u d

§ V r f f k l d h y l

Nxyd 61 Vxwmlp xwlvwcnhqv| q CE

; 1Kdx=Nddgd sxx r q 607f p wvnlwdd yhwCEUdylwln vxohwxd sxx d1Kdlwln
yhwCEP loCEyhl kdvlrhB

p xw7s

ndd7s

vxr 7s

oeh4s

p CEIndqdp xqd4s

slddqwxqwndd4s

<1Yddkwdyxxv=WECEsxx sxx dnhq yhwCEvxoh vln dylwln yr lp dnddwl/sxr d
p lqxxwd1 P lwd dnd/ mnd yddkgr oel nxox kmdp lvhq1 Yhghq yddkwdp lqhq
nhuwr slqwdchlylwlnq dqlghq p CECECE Slqwdchlylwd dqlhvd r q p rqlwd
shxdlqhlwd1

hl yddkwd7s

4 vlnxqlw6s

50< vln 5s

| d 43 vln 4s

431Vdp hxv=SiluCEsdshuq nhvnhon udw/ mnd vchdd r q 3/8 f p 1Dvhw yCElqwCE
53 f p nr unhd p lwad udwq sCEh1Nddgd yhwCEP lwadMlq qllq nxdq/ hwCEdw/hl
qCEhqCE kCECEndwr wxqd1Nxlqnd nr unhd yhmssdwv r qB

udw/hl kCECElndv, 7s

| d 53 f p -nlndv, 7s

49 Ò53 f p -p hnr vdp hd, 6s

9 Ò48 f p -vdp hd, 5s

3 Ò8 f p -hulwCE vdp hd, 4s

441sK=Ndw lqglnddw usdshu wvnlwddq yhwlnhq qllq nxdhvl dndd/ hwCEyCE hl
hqCEP xxv1Yhuwd yCECEdndknhw d r dyddq sK CEwlhnr r q1

90 -qr up ddb rCEylyghq sK, 7s

doh 9 -kdsdq, 6s

| d: -hp CEmlqhq, 5s

451Q| wr dwvlnkq| wndnnl nxxvl vlnwCECvnh vdp dM slwlnhw| kvlnhq -yr lwnhald
o p dnhwvchvhsCE suhy0vlp lqqr ad, 1Nxlqnd p r qv slwlnwCEdw| kvlnhqvCB

57s sddv yghqadlx

56s

E

9s kxr qr lq yghqadlx

461RvlyhCExyd wvnlp dwdM sdndwCEVdhqqdydwknvM vxudydw ydkhwd
sdqdp ddd Vdyh hqwl rd ddd qh vr yhxvnhq sdqdp ddd Xsø dg qr z -Xsø dg
gdvrd Xsø dg skr wv,1

Rssldw vdydw ylhOE srxm dnhd rpdq xrnndqvd
 qCEvnhqr wsdndwd vdxrhq vxwvhq nhvndyr q1 QllwOE
 adglwllq nr xoxq nCEvOE nduw/ mwd r d p | os r ssldghq
 vr yhxvnhq r wdp dwnxydwqCEvnhqr wsdnr lwd-nxyd : ,1

\ kvhghgr wd sOEjlp ph vlkhq/ hwOE NhxuxwhOE
 yghqadlx r q klyOE Ndnllhq qCEvnhqr wsdnr rhq
 nhvndyr r d ydq ndkghq slvnhq sOE/CE sdukddwd
 yghqadlxwOE1 OCEhv ndnlwd qCEvnhwOEyghq yOE/ vdp hxv rd
 sK r dydw sdukddw p dgr dlvhl Nr d hq xrnndq k|sr vnhlw
 kxr qrlp p dwd yghqadlxwOE slvlyOE sdnndqvd=
 P CEvOEakghd yghqadlx r d vnhOE/ kxr qrlqvOE1
 P CEvOEakwHl ydulqdvnhwOEExxox NhxuxwhOE/ p xwd
 vhwOE r vhw qCEv wlp lhdqnlqvlvqh dOE vxwvhq
 wnlqvdd=P CEvOEakghq | OE r nxw vndwwhy sdsulvkgdv
 ydlnxwqhh yghq adlxq1 Yhlwae r q r xw p hqqlqOE Nxyd : 1QCEvnhqr wsdndw
 yxr vnl p p hqlqCEvghd kxr qrdw nxqqr wd ndxh r d p lqhq
 rd kndkdwrlqhq1 Vxwlp xnv p p h r vrlw/ hwOEyghqadlx r q hghd hq kxr qrp sl nxlq
 ydulqdvqh NhxuxwhOE sxr dnd \ kghqnOE xrnndq k|sr vnh hl slvOE wsdndqvd
 sdukddwd yghqadlxwOE> v h r dnlq nlunnr yqhhwOE r vhw qCEv Yxr dvhOE mnd vd
 p dnlp lslvnhw p | os yghq qCEv | y | | ghwOE

\ kvhwp cnr xoxrhq rd r ssldqhlghq yOEExnl nr nr p r qldvqh r sslp lvr nr qdvxxghq
 dndqd mxkhydw1 Yrlp ph r dnd vxwlp xwd vxwddqdd v|nv|qCE vxwddylh
 vnlw p CE r ndndwqh ndqwd rd vxwdd p xxwxnr yhlwae nxqvr yxr vnhq vddwrd1

Nxydvlghr vxxghq vdwrd

P Inur p xrylq ydlnxwv yhvlnl ussxklq

P dnr Vfkudghu

Vdyr lw hhw

Rsslodwrydwk|ylq vhwvld/ p lwhq ur vndp lqh q yr l ydlnxwdd | p sCEwceq1Kh vhwCE/ hwehdoe yr lydw rCECEmp llq yhunnr lklq vdl p xxxqx q r qvr q khvhw| q rCEvhwq1 YCEhp p CE vhwvld kh r ydwvlvCEhwCEp xrylwkdndydw p Inur p xryhlnv rd hweCEp r qhwd nr vp hvlndq vkr vhwvld yr l rCE p Inur p xryld1 VCE CE vxwlp xnvhq vdnr lwxv r q r vr lwd/ hweCEp Inur p xrylwyr lydw rCE r vdl uylqwyhunnr d rd qCE p dkr dvhwv dkhxwdd kdwd p r qhwd hCEp hweCE

Vxwlp xnvwd r q r vr lwhw/ hweCEYhnlusxw+Gaskqld p d qd v| oCEp Inur p xryld/ mv vhwCE hq| p sCEwceqCE P xrylCE h| qCEwCE/ rCE vxxu ydlnxwv Gaskqldq nxr dlvxxvhwq vdl dCEv| p lvn| n| | q1

Elr σ j Id=V4/ V5/ V9

P dqbvhwv=V7/ V5

Vf whx vx v

Dnlylvhwv r q vxxqqlvhwv : 1ox ndq LCE husu rnvld1 Lvr p p lCE r sslodCE yr l dqb v lgd vx nvhwlhCE/ yhp p lq rd dylr lgd ydlnxwvhwv dhp p lq1

Dnlylvhwq yr l vxr uwd | p sCE yxr ghq1 NhwCE5yr l kchd r sslodghq ndqwd yhvlnl ussxrd vr slywd CECEvCEvdyhCE qllvCEd kdqnlwxd dnydUr dlnnhwCE

VkwCE sdqr slwv r q elr σ j ldwd p xwd dnylvhwv dwd k| yCE p dkr dlvxxghq vdwlvwd p lwhq p hylwudwvhwv dwp xrylv| p sCE p ddsdCE d1

Rshxwdsd r q v| oenhwv d slhq| kp CECE Rsslodw nlnlwdydw r sslp lvsCECEundq vkwCECE

Dlndd vlylvdq qr lq 7{ <3 p lq

0<3 p lq mkgdqr dkhvhwq rd ydp lwhxwv Inur p xrylq ydp lwhxwv r qh1

0<3 p lq nr nhghq d lwd lqh rd r sslp lvsCECEundq nlnlwd lqh

0<3 p lq yhvlnl ussxrhq dlvhwv rd p Inur vnr sr lqv

0<3 p lq vx whq vdwvhwv rd r sslp lvsCECEund

VXWVX OVXvmlp xnvhdqhq rd w lp lqqdqbq xnr qdr sslp lqh

P dwhulddwml yCdq hhw

05 ghndqwhuMd +q1733 p q shuq kp CE
04 ghndqwhuMd +q183 p q
0nxlyckllydd uylqwr dxr nvhnvl
0Dt xdd h=CEEnvy/CyhwCEd sxkgdwd vdghyhwCE
053 hqCEy/Mnlussxd shuq kp CE nnr op p lnr wvval dnyddlr ndxsdw
0p xxwp d dñj r sdnndd +nvhaqhq/ ylkurCEsxqdlqhq,
0klr p ddsduld; 33/ 4333
0slshwvCEEnlwd dlnvwx nCEhwCEllq sdanq sr lv hwCEy/Mnlussx p dkwxx vlvCE
0p lnr vnr r ssl
0p lnr vnr r slq dcvæM
0ydvhalq
0sr thvxxwlp hq vlylvh 55p p val ydvædyd
0p xxwp dq vhaq sCEEnghkdur d

Dn wylwhhw

Okr nnd rhvædq slhq q kp llq1 Mndqhq u kp CEndydwæd ndhv gæskqld sr sxæblvæ1 \ nvl
nr qwr æ rd wlvha vj æhvCE dñj r Orækhwæ1

41 Uj kp CEklr r dñj r sdnndw klr p ddsduld dñxæd rækhhv1 Klr p lvhq nCEvæCE hu
ndunhxnvld/ mævæ vdgædq hvlnr nr lvd p lnr p xrylq sææMd1 HulyCEwæEdñj r Orækhwæ
vnr lvædq | kvhq1 Nr nhvhq velylvædq ævæq nCEhq yhuædq rækhwæ1 VCEnhq r q 4333
ndunhxghævævæd rækhwæ1 +Nxyd 41



Nxyd 41 Chj r Orækhq vnr rdyæp lvd dñj r Orækhwæ sxunlvd

51 Nkwhq ghndqwnuolmlq nddghwdq qrlq 633 p oyhwOEYghqOE sosl wdh r ad 53058
 dwlwd nr nr nr nhq dddq1
 61 Nxp sddqnlq ghndqwnuolmlq dVCE 43 dnlxwlyhmlussxd1
 Dwdwqlp hVCE=4, nr qwr d/5, p xryld
 71 Nr qwr dVCE dVCE qrlq 53 nxlydkllydq rhyCEYhm vdd p xxwxd dhyCE/vdp hchvl
 81 P xryldwddq dVCE p lnr p xrylnkhw qllq sdng/ hwCEh shwCEvdvhw olmq
 slqqdq Nxyd51

Nxyd 51 Nkhw olmq sr krd

Nxyd 61 Vxwlp xvdwlr lghq vCE/vv

91 Dwdwlvhwddq yd lvdq sdnddq1 Vx uddxulqj r qydr dwdh yCECE Nxyd 61
 : 17; wqqqlq rdnhq dnhwdq mndvhw dwdq yhmnlussxrhq | nldghq p CECE slshwlp d
 qllvCEslhqhq ghndqwnuolmlq/ mwd r q slhq p CECEdwdw r vwxw yhwCE Vx nhw
 nlwdq | os1 Yhmnlussxwddxwddq vhw rdnhq vndvq r p ddq dwdq1
 ; 1 Wylwldp dwdq ydhdql ddxwmlq1 Ydhdql vnhh udhqghp dwd yhmlyllq
 Qrlq 4f p { 4f p sdvghkdur d dhwddq wylwlnq nhvhd1 Nxyd 71

Nxyd 71 QCEndwddq ydp lwxvp lnr vnr sr lqld ydlnq

<1 Vghkdur d slshwlgddq p dgr dmp p dq slhq vssd yhwCEmwd r q | nl yhmnlussx
 nr qwr dlp kp CECE QCEvhwCEh nCEvhwEshvlgdmd1 YhwCEslvCEr ad qllq sdng/ hwCE
 yhmnlussx s|v| khqj lwCEp xwdhl s|w| dlnxp ddq1 Vghkdur hwCEyhmnlussxq dlnnhvl
 QCEh p lnr vnr sr lgddq1 P lnr vnr sr lqqldv dndnddq hnhqnlq vxr dwrq dch1 Vdp d
 wlvhwddq p | os p lnr p xryldlp kp CE yhmnlussx1
 431 P r dp p lwd dwlr lwd p lnr vnr sr lgddq nr p h | nldCE Mndvhw | nldCEEnlwdq
 kdydqqr wxr dwrq vCEvCE os1 HulyCEvhw lnr p xrylwhr wxydwxr dwrw/ p lnce
 yhmnlussxw ydw| oghwlvCE
 441 Yhmnlussxw r vhwddq nCEq| nCECE nxdwq ndxw nxyld1
 451 Ulp kp CEyhwldydw p ld kdydqqr dndndnlq ulp lhq kdydqqr dvlvldq1
 461 Ndnlh ulp lhq dnhqvx nvhwdvhwddq | kvhw rd dnhwdq nhvldyr 1 Yhwddq
 | nldghq p CECEnr qwr dwd rd p lnr p xryldlp kp CECEr ssldwyr lydwkdydqqr dwd
 vxr nvhgldq up p h

WXVWX OVXwlp xnvhdghq rd wlp lqddghq xnr qdr ssip lghq

U| kp Qf vhwvdr wd ulssxhq yr lgddq vhwddylød vxqqlød vxvwxød uylqwyhunrr q rd dddp vr lgd p lnhq p lnr p xryl yr l nxøhd uylqwyhunr wd hwhqs Qf1

CivQf yr l valnwød p lnhq p xrylur vnd dlnnxx p hulylwrnhq p xnddq | p sQf p ddsdø d1 Hvp hunnlqQEn| ø| dqnøw mnd vssxlydølydød yxr qqd 4<<5 rd rydwøylqghw| p sQf p ddp dq -6,1 P hulylwrnhq ndkwød yr l k|ylq kdydqqr øwdø/ p lnhq j ø eddnd p r qhw | p sQf wøqj hø dnr ydø

Kxr p lr lwydd=

Yhmlusxrd ndqqøwd ndydwød mqnxx dndd hqqhq vhwQf dø lwøp lwø1 Qf vddgddq ychddw ø vxkvwndndvnm rd yr lgddq r ød ydøp r rd/ hwQf vhw/ yhm rd uxr nd vr yhwxydw yhmlusxlø1

Kllydd v| øqqløf yhmilusxlød vxr dnr r q nQfQf qøsvQf nr qddq vødvhw yQf qhq1 P lnr p xryl v| øqqløf yhmilusxlød hur wxydwøp p ld slwlvQf xrdwø1 Nxydw80 1 P lnr wø nmd hl sQfQf valnwøp ddp 7; vxqqlq nxøwød/ yr l dddp p lnr p xryl kp Qf p | ø yQf kllydd rd valnwød wø nmd hvp hunnl yl nr q sQfQf

Nxydw80 1 Yhmilusxq uchqgh rd p lnr p xryl q qQf p lqhq p lnr vnr r slwø1

Qf vhw#

41Gr p lfr søwlf sduf dñv dñhf wGskqld p d qd dñkh p r uskr ø j lf dñh klwø d qg p r dñxøduyhaB kwsv=22mxuqdbv ø vfr vj 2sø vr qh2duf dñBg@4346: 42m xuqdbv qhB4; : 8<38sr qhB4; : 8<31/337

51p sdr w r sr ø wlyhgh p lfr søwlf v r q Gskqld p d qd p r wøv d qg øsur gxf v r q lq ødñv q w r r g dydødøv1 kwsv=22shhñfr p 2duf dñv279342

61 uhqgø l ø dñhv

kwsv=22hqz lñshgldfr vj 2z lñ2l uhqgø bl ø dñhv

Ulva Nhnlvdr

Wd yr l w h h w

VqlMpsxnrlghq mxnrxnrxr d p d Ò dhwylwlvhql vqlr lwlhqd r q lqqr wvd/ dhwylrgd rd
p r wylrgd r ssip lwd vlqcdwvd hdp hqvlwlvhql vqlr lwlhqd r q vwxwxd wqgd rd LwE hwhq
hnr vj wlvhql lq rd hwhghq hwhE Ew rd vlwEwxd r ssld elr o j lq nhwlvhql wlvhql wvd rd
vhwE nllqqr wxd o r qqr wvd rd vhw lq lq lwdwE Vqlr lwlhqd r q r ssld wlvhql wvd rd
yxr ur ydlnxwlvhql wvd p xlgq ndqwd rd r ssld | kwlvhql wvlhql r ssip lvhql wvd rd

§ hnr v| w|hp lq udhqqh rd w|p lqvd +W/ V40V7/ V9/ O7/ O8,

§ 87(2)(b) 4/5/ V40/ 07/ 08,

§ 87(2)(b) v. shx xp lghq hu hq| p sOEwoeklg +16/ V40/7/ V9/ 07/ Q. ,

§ 87(2)(b) p h u n l i v v o r q q r q p r q l p x r w l v x x g h o h - W 6 / V 40V7/ V9/ O7/ O . ,

Şeir o j l a n r p l q d w n q n Q E w n l g h q v m C E x n l p x v 0 r d v l n g r q k d q n l q v p h q h v n p l h q n Q E w n e s l h q l p x r w l v h q v x n l p x n v h q v n h p l q h q r d v x o w h q u d s u w l p l q h q W / W / V 40.9/ O 4/ O 8.

~~§ v/cenhq/vnd p dclw/wd +V43/ V40V9/ O4/ O8,~~

Şlqqr wxp lqhq rd nllqqr wxp lqhq őr qqr wd rd vq lq lq wq Exr qvr wkv vq rd
| p sEwshw lwxghq ydylw xp lqhq +V7/ V9/ C8/ Q. ,

§yxr u ydlnxwv rdlq dvx +05,

§ p r q l o x n x v d l w + 07,

[illegible]

Wf whx wx v

Vqlvlp sxnr lghq mxnrr nxr dp dñwly/vhvw r q vxxqqlvnx : 1 rd ; 1 ox ndq r ssldññ
Dñwly/vhvw d sEEvdw r q elr ò j ldd dñwly/vhvwgr wrd vlgrr vñ Dñwly/vhvw v r sll p | ò
hlp hunlm dñr xox 81rd 91ox ndq r ssldññ

Hqqhq dnylvwvld r ssldon vkgCE qCE yCE wlp lqqdq vdyrlwv dylrlqqdq
shldwvwd dndvα1Dnylvwvld dxdw r ssldon nhur wdy/ hwCEdyrlwvhd r q p | o
k| o| qCE p dd rd p xlgq α r yxxwv1Ndnnllq n| v| p | nvlq2vkvCElq hl oeg| qv1rlnhd
ydwkwv1

Duyur lqqlq shuddwlv

r vdyr lw hghq vdyxwep lghq

r woenhgvnd u kp lwCEvdyr lwvhd | kvnlvoedhg r ssip lqhg,

r nxyd2ylqhr v2ydwkxnhv2hkvdCEExvlp xvndqvlr wd

r lwh0nd yhuwvduylr lqwl

r wduylwchwdhmp huihml r up wu kp CEr h dhwylwhmg dindodr slxwld mrlwld

WVWX OVXvnlp xnvhæqhq rd wlp lqddæqhq xør qdr ss lp lqhq

Rsslalv vdd valqdaqhq dnylvhlq r p ddaq sxkhdq hqvd dqnllqCEhmp hunlm T UOr r glq
naxwdr Rsslalv wlp ll r krlghq p xnddq | kghwCE p dq u kp CEvCEndqwdl

Dnylvhlq qv1 unr vsdndxwlp xnvhwyr lgddq vnkCEmn r lnhdaa udaqdaa val ax ndwd
r shwdaa val rsslalghq dndvnp lq, nhuCE lq qCEvhlghq rd Dgr eh VsdunhmvnvhwCE
r dylhq nxydp dnuaddq dyaadl

Ydva xnvhwvxwlp p xlvllqsdqr w nxydwylghr w valqghwdd Riilf h698-q vxwlp xndqv r q
v v1 rd qlklq sdwdaa dylrlqqlq hu ydkhlwdl Rsslalghq vxr w nvd vndwdaa p | ax
| kvhlvhl

P d whul d d d wml yCEd q hhw

r sslalghq r p dw sxkhdq hw mlwd p p 1 T UOr r gl axnlrd rd mnlq nxydr yhaav hmp 1
Vqdsvhg/ Vqdsf kdw

- r qCEndwlr lval val ydp llval qCEvhlvCEhmlq hdaaCE
- r vxuhqpxvaahrd
- r wluhr 0rd2val ydp lnur vnr r ssl
- r adlvkyd
- r slqvhlw
- r p xrylghq dlnndxvdaa
- r hualvd kabyhnd inv yhlq hdaaCEvhlvCE lwh,
- r ylyr lmq
- r yddhd
- r vlqlvp sxnd schdwln,

Dn wylwhhw

Vqlvp sxnr lghq mxnnr nxr dnp d/
unr vxvnlqva/ EDOWLSROLFH
axv| r vr lwhhwda=
kwsv22xud1124p 9s

Olva 4 Ydva xnvld vnkCEllq

VXWXX OVXwnlp xnvhæqhg rd w lp lqqðqhg xør qdr ss lp lqhq

00Ehwhhohdghq nxr dhp dqv| | q wvnlqv

51Rssldg r p d y d w x v / m n d u l s s x x w x n l w d y d w d v g l v l p s x n d w d l

81Rssldg r p dwdwknvht

§Nxr u Òvxnnd vlp sxnndd

§Ydlssd0vng huwhwCE xr qr wxx nxr uad

§ VivCEylwvxvxl Oyhm ylwd vip sxndq vivCEm

\$X\alpha wlvxvxn l Oyhm ylvad vip sxndwv x\alpha v

\$\text{VxondkdvOvxonhhnxr uhw}\$

\$Vxx \dot{O}lp sxndq uylaw klxnnndvhr kndxvdxwxkxq

\$NlaxnyhwÒ allgha d'xwð vlp sxndwvðvðvphwðEkdsshd m sr l'wðvðw

klldgr nvlgd' uylaw klxndw dwxydwnlaxwng slawd d nlxnmld shwCEOW

slhghwlsrhwlwzGCEgh nr kv/vlp sxndq vxxvd

\$Mod Ôvng dxyed vlp sxnnd nllqqlw/ sr kndg nyr l dlnxd sr kndwd

\$Vv05 | vsxw 0v0505 p 1p kdxnxq/ vxr ng nuxdqvxokvuxkdvhw

§ P d k a k n n x 0 v i p s x n d q u x d q w x d v h p l w e r v d / m w d u x d q u d y l q w d q h i v d
k a m d d

§ Vkr 0 0 Vlp s xndq ux xqwx d x v h p l w e q r v d / m m w d u x x d q u d l q w d d q h i v d k a m m d n d m m w d

\$Uxxd\alpha v\alpha\alpha v\alpha k\alpha\alpha h\alpha \text{ Ò } v\alpha\alpha v\alpha\alpha uxxd\alpha v\alpha\alpha v\alpha h\alpha

\$Vnxuxkdqha0dwCEwp laha

\$V|q0E0sxp ssdd yhuu

\$Shu05xnnr 0udylqrr q vlv0505 05wdushhwr p dwdqghwsr lwx ydw

: 1 Vqlvlp sxndw vxrgdw n| p p hq|CEowr nd yhwCEyxr unxghwd/ mvaq qlklq yr l
 nhuCEv|CE|p sCEwvCEr dyld |p sCEwv|un| rCEnd p lnr p xrynd Qh kdwdydw
 vqlvlp sxnr lghq hCE CE

;~~1nd<1Rssldg r p dwdylr wrd s0E7np 0E7~~

VX VWX OVW vwx vw WXV Wxv vxw VwX

Wd yr l w h h w

Wf whx wx v

0vdu nr lwxvr q vnkgoe| kp oevce r oedm/ mnr q nr r wddq yghq hul r o p xr w rnhq
hlwqyp lw oep dvrp dwd hul r ssldqhlghq qoeoxo p dwd1

0 dhwylvhw lwd yr l nhnlw/oe l r o j lddq rd p ddyvhwvnhq rd sr lp ld p xnddq qoeoxo p ld
nhp ldwd rd i|vlndwd/ p xwd p|oe p dkr o vxxnvhq p xnddq v|yhaqoe vrosoe
nhp lddq i|vlndq rd2vdl nxydvlvnhq vlvoeoe

0 dhwylvhw l r q vdu nr lwxv ; 0<1 ox ndoh mnr yhwlvhp dq ddxvxnvhq vxsshp p lq
w vwxvwxqdvdl o dhp p lq vlvoeoh q r slvnxwd/ mo lq oel nxy lq vhdv/nvhw oyr l
y dmd slghp p oe vdl r ssldoed yr l vhw oehmp 1 lwh vnkvr oedq lp dvlr vdl vdl
vdu nhxyl d1

0 vrosnhqvd vnkgoe| sdhlwldq vdl nr o hq o h o e| khaj hq u| kp oevce mwd mndvhoed r q
ydwxx ndnlwld vros r vldw1 vrosce r ssldqhlghq yoe hq vrosrhr shuxwx ndkvnhq
ur r d|q> ylvx d vhw ydwdy dwdv lghv r lp lwdv d1

0 xonr qd vrosnhqvd | q yduvddq 4 { : 8 p lq r sslvqxv vdl 5 { 78 p lq r sslvqxvld/ nr oedmq
vnhp lvnhq 5 { : 8 p lq vdl 6 { 78 p lq

0 ydop llwd vrosce v dhr oed
0 lwh r lwxv p dvrp dnxyd vdl nr oedm p dvrp dnxylwld/ mlklq d v o e e|
oe l nxy lq d p dkr o vmp p dq p r qvdl p dvrp dq r vdd/ mlwld yhm r q r vddv hq d1
v o e o e vdl vrosce yr lgddq w vwxvdl nxydvlvnhq vxqql oed1

0 oel nxy lq vhdv/nvhw hmp 1 p l v o e yghoed v s d k v x oel nxy dwd/ p lvnhq h d o e
k| o e| q o e e h w o e oel nxy dwd r q h1 vhdv/nvhw yr l vdy r lwh lghq rd n o e h w o e d v o e dnydq
dndq p xnddq r oed vxsshp p dwdv o dhp p dwdv qh yr lgddq nr r wdd elr o j lddq/
p ddyvnhg r q rd2vdl nhp lddq vxqql oed1

Dn wylwhhw

\ p s C E w s C E h w C E f v h o l q h q s d n n d / m n q n d p d i v r p d w d o e w | p d k g r o l v p p d q p r q v d
n r k v d y h w h q d i w h q d i w h q C E d y d q d o d r k r i n h q r s s l o d d y x o d = y h g h q r o p x r g r w r d
y h l p d i v r p d w d , 1 M v | k g h w C E p d i v r p d n x y d w d h i y C E q C E | k v C E d n d d n d n l p d k g r o l v w
y h w h q d i w h q C E n r k g d w y r l r w d x v h v d n x y l d m n r v d p d w d s d n d w d h u v x x q v l l q / x v h d w d h u
s d n d w d v d n x y d w d p d i v r p d q 6 9 3 0 n d p h u d o d P d i v r p d n x y d w d h i v d y l w h q C E C E d n d n d
n r k v h v d C E h o C E m v n x y d r q h l p 1 r v w x g u r q h o d

OEInxydw r vlvdcq lwh qllwOE yhgq rOEwE yhwq dlvrylwOE nr kvnlw/ mrvd rydw
p dlvhp dwd -p xwv hlyOEyOEwOE OEwOE vundw/
, OEInhw yr lgdcq qdxxr lwd ox qqr wd vl vkgOE lwh p | oxhp p lq vlvOE Vhw/vnhw
OEInxyldydwq nluvlvdcq vhgq qkoxq rOEhwq | kghwOE

P d w h u l d d d w n d y O E d q h h w

On0Eq|nn0E0dp hud nxyllhq r w0p lvnhq rnv p dkg r dwd/ 6930ndp hud,
 0Vlvnr qh VKlqj dqn 0nr r vlnhq vlnhp lvnhq rd slq/sdyhox r ssl0dghq nxyllhq rd
 0E|vlnghq v0bhqvp lvnhq
 Or shw0d0x0r p d0xr nnd VKlqj dqnllq rd nr r glwr ssl0d0h
 0v/0eyr lgd0q wlvnw0p |0slp dq v0En0M0Eqhiv0d0xwv rd sllw0Eq2p d0d0v0q
 p dlvhp dnxydwdnr r vlnq hlvln0 vlnwlvsdsh0h

Oil whhw

Qlwn 41R kmr ssloob=yhgq r o p xr gr wp dvrp dwd

Sindr km Wklqj dqnllq=kwsv=22xup1l24p f;

OOE v h v

kwsv-22z z z 1khd12kholqnl2il2dwxp lqhq0td p sduwr 2oxr qwr 0td
ylkhudxhnl2p r qlp xr wlvxxv2hnr vj wlrhp l2yhm

wXwX wXwX xnvhdqh q rd wlp lqdddqhq xnr qdr ss lp lqh q

Yhghq r σ p xr gr wp dlvp dwd

W/cevkGCE sdhlwql vl nr q hqQhCE khaj hq ul kp CECEmwdmndvhaer q ydwx
ndnlwvl/oej r vlwvlWknCE/oej dr lwop lvhnl rd hwhqsCE yllp lvhnl vl/oejdr
nxlvhqlq ul kp CE rCEhqlq nhvnhq ydxyxnlhq rd p lhdqnlqqr q nr kvllghq shuxwlvhae=
vkvCEul kp CECE ydw

W/cevkCEdr r adlvh r vlwx p dlvp dxyd vl nr advl p dlvp dxyvlw/ mlklq
p hunlvCE p dkgr olvp p dq p r qvl p dlvp dq r vdl/ mlwd yhm r q r vdlvhd1

RKMHHMPDLVHPDNXYDQNRRODDVLQRWDP LVHHQ

HwlvCE p sCEwsvCEhoolqh q sdlnnd/ mqn d p dlvp dwd oegCElv
p dkgr olvp p dq p r qvl nr kvld ylvnhq dlwylhq -dvl r dylhq dvr nhq dyxol-yhghq
r σ p xr gr wld yhm p dlvp dwd, 1Mlv | kghwCE p dlvp dxydwd hlyCEqCE | kvCE
dnddndnl p dkgr olvhwylvnhq dlwylCEnr kgdl/yr lvh r wld xvlvdl nxyld mnr
vdp dwd sdndwd hl vxxqlq vl xvlvdl hl sdndwd1P dlvp dxydwd hl
vdyvlw qCE | CE dndnd nr kvlvdl CEhCEnv nxyd r q hml 1r vlwx gur qhvl
CEInxydvr vlwddq lvh/ mlvhq dlwCEp xndq ydq vha vl d ylvnhq dlwylCE
nr kvlvdl/ mlvdl nxyd p dwdq qh p dlvp dwd oep/1

RKMHHMQ KINXYLHQRWDP LVHHQ

Rwlddydvlwvl sdndwd CEInxyld/ mlwd yhm p dlvp dwd qCE | vhyCElv
CEInxydq | kvllvnhq dlwCEp vhwCElvnw σ sxvlvnhq vl/oej1

RKMHW, QWNVHQVNHPLVHQ

Yr lwnOEIwOEImp 1sxkhdq hq vqghdp hq vkwOEIhq nr nr vjoeih val p r qvdl hu
vkwOEIvOEIul OEInxylIq1, OEI yr Igddq qdkkr lwdp ddwr wd val vnkqOEIvOEI
VluOEIOEIVhgr wr dqnlqOEIvOEI
HwlnOEI p dvhp dwd mndlvhwd r o p xr gr wd yOEIqOEI ndnvl nr kghwd
nOEIvOEI dsxqd ddr dydd yhl p dvhp dwd dlvwd

P dvhp dnyxd val nxychr oadm dlvwOEI Vklqj dqnlq/ Suh}Ilg/ hlvjvr krhp dbq val
vxo wlvwdq val slluhvOEI2p ddbvdbq sdshuloh1
VOEnob/hq vkwvdbq dlvwOEI vlnhp p dvlwlvwq wOEInxydwrd OEIvlnvhwldlvwOEI
dqnnhlqOEI

Sdshulvkwvdbq vxo wlvwOEInxydwlvwq vlnwlvqhhq yr l vlvwOEI -mp 1nxxvlnxø lr nvl
val p xxkxq p xr wr q vlvwvxd r uj qp lnlnnrx uhqd, rd dlp dvl vhnOEIxr dndvkwvdbq1

Rssldqhlw dnylvhlwld r ydwp xndqd elr o jld/ p d d q v h w r d d l n x q v d l Mlv v l k v o e e
v r l n x w d d r v d q d v x u h p s d l L v o e h u l o d w l u d v h r n r q d l v x x w d / n r n r q d l v x x v h n q v x d h p x n d d q
p | o e o g l q n l h n q / n h p l d q r d i | v l n d q v l v o e e U d w l u d q d p x l o d u d w l o d v x v l v d d q L v o e h u h q
y h v o e n h p l d q r d i | v l n d q p h q h n p l q / v x x w x v d d q v h q v x r r h o x q d l n n l h q r d v h r n l o s d o x q
d y x o d / r v l v d d q k d y l o d v h o e d q d w r q 0 r d s o d q n r q q o e v n l v o e h n o e d y d q q r l g d d q | p s o e l w o e
h u l d w l h q r d y d o n x y d d p d o d l

Dnylvhlw r q s d o d w d v r l n x w d d d n d l q v | n v | o e v d p | o e o e n h y o e e n x q L v o e h u h q
u d q v d d q s o e e h v o e e s x r d w d l V l k v o e e o e s l v n h o d d q x o r q d / m n r s l h q l w o e l k p l w o e d
s d h l w d q l Mlv v r l n x w d d n r n r u d w l u d q d / p | o e g l j l v d w r d r s l v d d q h q h p p o e h m p 1
y d o n x y d k v u d w l o d l V o e o e | n l v o e h n q v l k v o e e y d d g l w d y d d n d r q q 163078 p l q 1

P d w h u l d d d w n d y o e d q h h w

à V h o h m r u l w h q q h q d n y l v h l w l d - n v 1 d l v n 4, 1

à O d h m x y d w n d o h m q q l p h v n r u l n o d h m p h u n l n l v h x u d y l w d o h h l w d - p d o d l w h l w o e l, =

O d q q x w e k d k n d / n d o d l u d / p h u n r v n d / u d q v o l s l / l v r n r v n h o / q r n l n d q d / v x n n d v r v n d /
o k o x m x w h q / y d o n s r v n l k d q k l / v l q l v u d / v l o n o e k d u p d o r n n l /
v h o e n n l / q d x u x o n n l / n x l n n d / v l o n l x l n n x

O n d o v e l o h n d / n l o k d d / v x u n d / p h u l o k l / n d p s h o l / q d k n l d q h q / n x k d / d y h q / v l n d /
k d k n l / p d g h / o k q d / v o e n l

O q l v o e n o e s | o e l o e h q / l v o e h u h q q r u s s d / k d u p d o k | o h

O n d v y l w n d d n y o e e u h n r k d x u / p h u d n n d / r o e y l u x r n r / d y h q y l w d / v n y d h s s o e u d q v d
d s l / u h q w n n d / u d q v h x n n d / n x u h q p l h n n d / r o e y l u x r n r /
r o e y l n d v o l / r v p d q n o e l / x o s x n n d / o p p h

O v h o n o e d q d w r p d w e u d s x / n d v n d / v l q l v p s x n n d / n r u y d h g x x v d / d p d h r v l o /
n l h n n r n r v l o / n x r v l n d / y h l k o e o e e n l / v x g h q n r u h q q r q
v x n n d / v x g h q n r u h q w / v x n h o d d / k r s h d v s s o e l v r 0 r d
s l n n x p d o x d q h q / y h l v n r u s l r q l

O s o d q n r q y h l n l u s s x / u d v h o e / s l l d n y o e l d q r e d h l w l

à N d u w d n x y l h q v l n d q q l w d l

D n w y l v h h w l

H q q h q d n y l v h l w l d =

41 Y d o l w n d o h m r u l w r d p d k g r o h q h q n d u w d, 1

51 V x v x w p d d w r n r k v l v h n h q h x n o e h n q r d y l h n r u l w h q q h q d n y l v h l w l d d o x d l

V X W X O V X v n l p x n v h o d q h q r d w l p l q d o d q h q x o r q d r s s l p l q h q

vw wvx ovx wvp xnvæghq rd w lp lqðæghq xør qdr ss lp lqhq

51\ kglw0E

61P xr gr wd u dyl qv nhwzard

71OlvoEnkwoCEEp xlvwshd

Oduwyr l p | o s u kp l vhoEduolvlq u kp llq/ hmp 1 ndylw holo h w vhoEduqndvwhoholo h w
 vhoEduq dw p dwholo h w rgh1

[illegible]

Hmp hunnl nxyd0rdvdqchr ulwef1
Ydp llvd nxyld oepw0Ehualvcd nxydkhxsdyhxlcd r shwdr l sllu0E5hcd vhw1

VXVWX OVXvmlp xnvhdqhq rd w lp lqqdæqhq xør qdr sslp lqhq

WXVWX OVXVWlp xnvhdqhq rd wlp lqddqhq xnr qdr sslp lqhq

Kdywwudqghq r f k vnelu

MkdqddQ|p dñ

L ghq kCExssj liviq CEvj hdyhq r p kdyvlnhqv r f k lqvneqv yCEvhu sŽ hwwglj lvdr f k
dnvlyhudqgh vCEv Hdyhudq xqghuvcehu kdyvlnhqv yCEvhu j hqr p dwsaf hud xwyCEvhuqd
hqdj w wudqghqv yhj hvmlr qv}r qhu l hq srz husr lqv0lo vdp w j hqr p dw dvehwCEp d
yCEvhuqd l lqvneqv yCEvj khwxqghuvcehv r fnvŽ l hq srz husr lqv0lor f k dvehwCEv r f k
ghdv lq hqdj wylnd yCEvhu vr p CEvslvnd ioeqCEvj vidwly d thvshnlyh qCEvj vlnd vnelu
Wvdp p dqv ixqghudu p dq r fnvŽ sŽ kxu ioekŽdqghqd vnlñu vj l gh r dñd
yhj hvmlr qv}r qhuqd r f k l gh r dñd vlyshuqd dy vneluqd vdp wkxu yCEvhuqd kdu dqs dwdwlvj
vnevlnedqghuqd l

P f QJ UXSS

f unxw:

WLGvf WJ f QJ

Hq dnvly q %3 p lq

P f O

Elr σ j l P 4 2 N7 N8

Elr σ j l P 5 2 N7/ N8

Elr σ j l P 6 2 N7/ N:

P DWHULDO

Gdv r hu

Sr z husr lqv0ldq ŐKdywwudqghqv r f k lqvneqv yCEvhuŐ

Vnr edqv elr σ j l ŐKdy r f k vnelu

LQWUXNWLRQHU

Odggd sr z husr lqv0ldq ŐKdywwudqghqv r f k lqvneqv yCEvhuŐi ũžq kws v=22xuđ1l24q{ H

Elq 41H{hp shovdghi ũžq SRZ HUSRLQW0 LCHQ ŐKdywwudqghqv r f k lqvneqv yCEvhuŐ

Rshwdrh q vxxqqlwdrh p ld r shwvnr nr qdlvxxnvd
xdr qdr sslp lvhq vhnCEvnlp xnvhdvxxghq CEvnr kglwd1
Nlud vlvCEEdp llvd vce knlvdr lghr lvd r shwvnhq/
r shwdrh r shwdrh1

SLQNNND

Odhrqvp xnvhq r sslp lv p sCEvnr